

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1218.—VOL. XXVIII.

London, Saturday, December 25, 1858.

STAMPED.....SIXPENCE.  
UNSTAMPED.....FIVEPENCE.

MR. JAMES CROFTS, MINING AND SHAREBROKER,  
No. 1, FINCH LANE, LONDON (established 14 years), TRANSACTS every  
kind of BUSINESS IN MINING SHARES, but, not being a DEALER, BUYS and SELLS  
only on orders confined to him.

The MINING MARKET is in a highly encouraging state for Investors, and many mines  
are yielding large profits on late purchases, for a continuation of which there is still a  
considerable margin.

Mr. CROFTS refers the readers of the Journal to his article on the changes and aspects  
of the mining market, on page 850, in which will be found general and particular discussions  
on the value of mining property, on, or irrespective of, the market; his opinions  
being backed by experience, but not offered as infallible. He will be happy to advise ca-  
pitalists into safe investments at all times.

\* \* \* Mr. CROFTS has FOR SALE, belonging to the estate of a gentleman deceased,  
1000 shares in Crowndale, and 6 shares in Brynford Hall (dividend mine), absolutely,  
and for which offers are solicited.

MR. JAMES LANE, No. 29, THREADNEEDLE STREET,  
MINING SHARE DEALER.

JAMES B. BRENCHEY, of 19, TOKENHOUSE YARD,  
LONDON, is a BUYER or SELLER in DIVIDEND and PROGRESSIVE  
MINES, for CASH. Bankers: London and Westminster.

DIVIDEND MINES, well selected, are the BEST of all PUBLIC  
INVESTMENTS, paying, as they do (in dividends every two or three months),  
from 20 to 30 per cent. per annum. NON-DIVIDEND MINES, carefully chosen,  
frequently advance in value 500 per cent., or more.

PETER WATSON, having 14 years' experience in every department of mining and  
its management, together with an extensive and regular correspondence with mining  
agents and others in Cornwall, Devon, and elsewhere, is enabled to judge of and select  
mines of intrinsic value.

A SPECIAL REPORT (WEEKLY) WILL APPEAR IN  
PETER WATSON'S "MINING CIRCULAR," by his own Agents. ABRIDGED  
REPORTS will also be given, and important information on the present and future op-  
erations and prospects of mines throughout Cornwall and Devon, with advice thereon as  
to purchase or sale of shares.

Those who desire to have copies regularly sent them will be supplied for an annual  
subscription of £1 1s., or 6d. per copy.

PETER WATSON.

English and Foreign Stock, Share, and Mining Offices,  
3, Old Broad-street, London, E.C.

MR. H. B. RYE SPECIALLY RECOMMENDS to his clients and  
the public the FOLLOWING MINES for IMMEDIATE INVESTMENT, as  
they are of the soundest character, and undoubtedly first-rate prospects:—

Bryntail.  
United Mines.  
77, Old Broad-street, E.C.

Wheat Kitty.  
Wheat Reeth.  
Wheat Grenville.

East Trefusis.  
Ding Dong.  
North Roskear.

THE FOLLOWING MINES are WORTH NOTICE at  
PRESENT PRICES:—

Bell and Larath.  
Butler and Bassett United.  
Brose.  
Bryntail.  
Bell and Larath.  
Cradock Moor.  
Carnforth.  
Ding Dong.  
East Russell.  
East Providence.

Mary Ann.  
Margaret.  
North Dolcoath.  
North Roskear.  
North Wheal Crofty.  
North Levant.  
Old Trefusis United.  
Provident.  
South Francis.  
South Cudlara.

Toivaden.  
Tolcarne.  
Trelawny.  
Wheat Charlotte.  
West Son.  
Wheat Kitty (Levant).  
Wheat Mary.  
Wheat Margery.  
Wheat Edward.

In consequence of the Christmas holidays a limited amount of business has been trans-  
acted in the money market, and it is difficult to give correct valuing and selling prices.

All orders promptly attended to. Commission, 1½ per cent.

Mr. LELEAN, Mine Broker and Share Dealer, 4, Cuthbert-court, Old Broad-street, E.C.

THOMAS ROACH, MINING AGENT,  
37, OLD BROAD STREET, E.C.

MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING  
AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.  
N.B. Business transacted in every description of stock and shares.

JOHN GLEDHILL AND CO., MINE AGENTS, SHARE  
BROKERS, AND GENERAL DEALERS  
MINING RECORD OFFICE, 12, SOUTH PARADE, LEEDS.

Mines well selected are the best investments, paying from 15 to 30 per cent. on the  
outlay. They have to OFFER SHARES in most of the DIVIDEND and PROGRESSIVE  
MINES, and are ready to give every information relative to all mining matters.

Dated Dec. 24, 1858.

HENRY GOULD SHARP, 32, POULTRY, LONDON, E.C.,  
will punctually attend to BUYING or SELLING instructions in BRITISH and  
FOREIGN STOCKS, SHARES, and SECURITIES of every marketable description at  
the closest dealing prices.

SOULD ADVICE and RELIABLE INFORMATION to CAPITALISTS seeking safe  
and profitable investments. BRITISH MINE SHARES pay 15 to 25 per cent. per  
annum in DIVIDENDS, and often advance many hundreds per cent. on the outlay a few  
months after purchase.

Commission on buying and selling transactions 1½ per cent.

Bankers: London and Westminster Bank, Lothbury, London, E.C.

TO CAPITALISTS.—RELIABLE INFORMATION may be  
obtained on application to the undersigned, in respect of MISCELLANEOUS  
SECURITIES generally. BANKS, INSURANCE SHARES, LAND COMPANIES,  
MINES (British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC  
FUNDS BOUGHT and SOLD at the closest market price, and at moderate commission.  
Reference given and required.

JOHN BATTERS, Stock and Sharebroker,  
26, Throgmorton-street, London, E.C.

MR. WILLIAM BROWNE, JUN. (Successor to Mr. W. C. Foulkes,  
late of 53, Old Broad-street, London), has REMOVED to 31, BROAD STREET,  
BUILDINGS, LONDON (a few doors from 53, Old Broad-street), and BUYS and SELLS  
MINING, RAILWAY, and OTHER SHARES, and every other description of transfer-  
able property, on commission only.

ROBERT OLDREY, STOCK, SHARE, AND MINING  
BROKER, 8, FINCH LANE (adjoining the City Bank), LONDON, E.C.

Terms of commission for buying or selling shares in mines, railways, or banks, for-  
warded on application. Bankers: London Joint-Stock Bank.

MR. A. B. SALOM FRANCIS,  
MINE AGENT AND SURVEYOR, TALYBONT, CARDIGANSHIRE.

MR. JOHN ANTHONY, MINING ENGINEER.  
ESTIMATES AND SPECIFICATIONS FOR ALL KINDS OF  
MACHINERY PREPARED.

11, ARUNDEL CRESCENT, PLYMOUTH.

MR. E. GOMPERS has BUSINESS to TRANSACT in most of  
the MINES usually in REQUEST in the MINING MARKET.

3, Crown-court, Threadneedle-street.

FIFTEEN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM  
upon current value of shares, in CORNISH TIN and COPPER MINES.

Dividends payable two-monthly or quarterly.

MR. R. TREDDINICK, MINING ENGINEER, SENDS his  
SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES  
upon the receipt of a Fee of One Guinea.

Review of Cornish and Devon Mining Enterprise, 5s. per copy.

Maps per post of the Butler and Bassett, Great Vor, Alfred Consols, the Providence and

Margaret, South Caradon, and the Devon Great Consols Districts, 2s. 6d. each.

Cornish Mines, well selected, pay better than any other description of securities, are

free from risks, and entail less responsibility than banks and other joint-stock com-  
panies. Shares bought and sold on commission of 2½ per cent.

Money advanced at 10 per cent. annually, for short or long periods, upon approved Min-  
ing Shares. 4, Austinfriars, Old Broad-street, London, E.C.

MINING SHARES FOR SALE, FOR IMMEDIATE CASH:—

10 Tincroft, 2½%. 25 Harriett, 17s. 6d. 10 North Downs, 2½%.

10 Hington Down, 2½%. 50 Graville, 31s. 3d. 50 Addams, 26s. 6d.

10 South Corn Bore, 2½%. 50 Vale of Towy, 13s. 1 North Roskear, 2½%.

10 Kelly Bray, 2½%. 100 West Par, 16s. 6d. 10 North Robert, 2½%.

5 East Russell, 2½%. 50 Great Hewas, 19s. 6d. 5 Tolvadden, 2½%.

50 Lady Bertha, 31s. 20 St. Day United, 11s. 6d. 20 Great Wheal Vor, 14s.

WANTED:— 1 Grambler, £140. 20 Marke Valley, 2½%.

1 South Francis, £232½. 100 Cath. & Jane, 6s. 50 Tolcarne, 14s. 6d.

2 Trevolo, £15. 1 United Mines, £12½. 100 South Lady Bertha, 6s.

W. MICHELL having inspected East Russell and Lady Bertha Mine on Tuesday last, is  
eager to furnish his friends with reports of same, on receipt of £2. 2s. for each mine.  
Apply to W. MICHELL, 3, Austinfriars, London, E.C.—December 24, 1858.

GEORGE MOORE,  
1, CROWN COURT, THREADNEEDLE STREET.

GEORGE MOORE will SELL the following SHARES, or any part, to-day, at quoted  
prices, FREE OF ANY COMMISSION:—

1 Carn Brea, £70. 2 North Roskear, £21½%. 1 West Seton, £297½.

5 Great So. Togus, £13½%. 5 Par Consols, £16½%. 1 Wheal Butler, £140.

20 Great Wheat Vor, 15s. 1 Providence, £62½%. 2 Wh. Mary Ann, £45½.

50 Vale of Towy, 12s. 9d. 50 Vale of Towy.

NON-DIVIDEND.

10 Camborne Vean (an offer  
wanted.) 20 Gawton, 6s. 9d. 1 Old Tolgas United.

1 East Bassett. 50 Great Wheal Sheva, 11s. 9d. 10 So. Caradon Hooper, 15s.

20 East Gunnis Lake, 30s. 10 Great Alfred, £3½%. 25 Tolcarne, 16s. 6d.

25 East Rosewarne. 50 Holm bush. 50 Wheal Crebor, 14s. 6d.

50 Lady Bertha, 30s. 9d. 20 Wheal Grenville, 29s.

20 East Russell. 20 North Robert.

PURCHASEES of undoubted respectability can register transfers and receive CERTI-  
FICATES of same previous to PAYMENT.

In any business that George Moore is favoured with, in which he is the buyer, he  
will give CASH ON RECEIPT OF TRANSFER.

MR. T. P. THOMAS, MINING AUCTIONEER,  
2, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL  
MINING SHARE DEALER,

11, DALE STREET, LIVERPOOL.

JOHN ROBERT PIKE,  
MINING AND GENERAL SHARE DEALER,  
3, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

Now Ready,  
IS MINING FOR METALLIC ORES A LEGITIMATE AND PROFITABLE  
CHANNEL FOR INVESTMENT? OR IS IT NOT? FACTS AND FIGURES.  
May be had gratis on application, either personally or by letter.

WEST END MINE AND QUARRY OFFICES, 10, REGENCY STREET, S.W.,  
PALM MALL.

MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL  
SURVEYORS, undertake the MANAGEMENT and WORKING of MINES,  
QUARRIES, &c., and CONDUCT the LONDON AGENCY of all MINERAL PRO-  
PERTIES in their offices with system, economy, and regularity.

MESSRS. BRUNTON and Co. beg to inform proprietors of mines, &c., that the business of

these properties is carried on in their office upon the following principles, viz.:—

Accounts systematically and closely made up.

Statements in detail, and clear summaries of finance and expenditure.

Entire and impartial openness of books, reports, and documents, to all shareholders,  
for perusal or extract.

Immediate communication of any important occurrence to the shareholders.

MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY,  
PLANT, and COSTS OF WORKING FURNISHED.

TWENTY PER CENT. DIVIDEND SILVER LEAD MINE,  
CARDIGANSHIRE.—WANTED, a PARTNER with SIX HUNDRED POUNDS  
to the capital to be employed in putting down the required machinery, and further working  
the mine. The ore now raised with four men will leave a computed profit of 20 per cent.  
on two months' working. The mine is well opened, and a very strong rich lode in one  
of the most celebrated dividend-paying districts in Cardiganshire; on the same lodes, and  
adjoining one of the celebrated mines that has been making £20,000 per annum profit.  
There is ample land for working, with increasing prospects and rising profits.

—Further information will be given to principals on application to "A. B.," Mining  
Journal office, 26, Fleet-street, London, E.C.

TO CAPITALISTS.—An OPPORTUNITY for INVESTMENT  
in NORTH WALES, for £3000 to £4000, presents itself, under most valuable ad-  
vantages.—Address to Mr. C. FERGUSON, Mining Journal, 26, Fleet-street, London.

TO BE SOLD, a very valuable MANGANESE and COPPER  
MINE. Also, FOUR HUNDRED TONS of MANGANESE of good quality,  
ready for market.—Apply to the proprietor, Captain THOMAS TONKIN, Glandore Leap,  
county Cork, Ireland.

BLEND OR BLACK JACK—FOR SALE, EIGHTY  
ONE HUNDRED TONS of the above, samples of which, with price, &c., may  
be had on application to POWNING, STEPHENS, and Co., Kenwyn-street, Truro, Cornwall.  
Offers will be received up to the 31st December.

TO COAL PROPRIETORS.—WANTED, a SITUATION as  
COLLIERY AGENT, by a young man who has been connected with collieries,  
and has had a good insight into different modes of working and ventilation, who also  
understands land and mineral surveying, and is a good accountant.—Address, "Y. Z.,"  
Mining Journal office, 26, Fleet-street, London, E.C.

TO ALKALI AND SULPHURIC ACID MANUFACTURERS.  
—The ADVERTISER has had the sole management of a large manufactory for  
several years, and is competent to PLAN, ERECT, or MANAGE a similar concern of  
any magnitude, and on the most improved principles, is OPEN to TREAT with manu-  
facturers having works at present in operation, or capitalists about to erect the same, in  
any part of England or abroad. Highly respectable reference as to ability and character  
will be given.—Communications may be addressed to "X. Y.," care of Mr. Jas. Newton  
Warburton, 30, Cumberland-row, Newcastle-on-Tyne.

TO COPPER AND LEAD SMELTERS.—The ADVERTISER,  
who has had considerable experience in smelting copper, lead, and silver ores,  
which he thoroughly understands, is OPEN to a RE-ENGAGEMENT in a SMELTING  
WORKS. The highest references.—Address, "J. L." Thomas Haddock, Esq., solicitor,  
St. Helen's, Lancashire.

PARTNER WANTED.—A GENTLEMAN possessing a  
VALUABLE and EXTENSIVE COLLIERY in NORTH WALES is DESIRous  
of EXTENDING his WORKS, and for that purpose of meeting with ONE OR MORE  
PARTNERS, with capital, to join him. The strictest references will be given and re-  
quired.—Address, "Y. Z." Post-office, Rossett, Wrexham.

WANTED, a PERSON of intelligence, who has a PRACTICAL  
KNOWLEDGE of the ROLLING of COPPER and YELLOW METAL, as a  
MANAGER of the COPPER and YELLOW METAL ROLLING and HAMMER  
MILLS, at Llanelli, South Wales. He must be well acquainted with machinery and the  
management of mill work in general. Testimonials of character and ability will be  
required.—Application to be made, either personally or otherwise, to C. W. NEVILLE, Esq.,  
Copper Works, Llanelli, South Wales.

WANTED, a CLERK to CORRESPOND in the FRENCH and  
GERMAN LANGUAGES, and having a KNOWLEDGE of the IRON and  
COAL TRADE.—Apply by letter, stating age and salary required, to JOHN ROGERS  
and Co., Newcastle-on-Tyne.

WANTED, as MANAGER, a person THOROUGHLY and  
PRACTICALLY ACQUAINTED with the MANUFACTURE of the BEST  
and FINEST QUALITIES of MALLEABLE IRON in all its details, and to SUPER-  
INTEND the ERECTION, and UNDERTAKE the MANAGEMENT of IRON-  
WORKS. None need apply but those who by experience are thoroughly competent to  
fulfil the duties of the situation.—Apply by letter to "H. H.," 12, Stock Orchard Villas,  
Caledonian-road, Holloway, N.

WANTED, a COLLIER VIEWER, experienced in mining  
operations, and COMPETENT to TAKE the MANAGEMENT of the UNDER-  
GROUND DEPARTMENT of a COLLIERY, MAY HEAR of a VACANCY on ap-  
plication to "C. Z." at the office of the Mining Journal, 26, Fleet-street,

## Original Correspondence.

## COAL MINE INSPECTION.

SIR.—We are not surprised to see the strong articles in the *Mining Journal* on the subject of Coal Mine Inspection; every day brings us overwhelming evidence that the working of the Act has proved almost a complete failure. The ever-recurring explosions, with the mangled bodies of the victims; the despairing cries of drowning wretches who perish miserably in inundated pits; cry aloud for enquiry as to the cause of the almost utter failure in the working of a wise and good Act of Parliament. It is impossible that it can be a pleasant duty for a journalist to publish such an article as that alluded to; but it is, we think, the duty of all in any way connected with, or interested in, coal mining, and on all men possessed of a spark of philanthropy or humanity, to exert themselves to discover, if possible, the cause of such an awful state of things; and also discover, some remedy. It is with this view we send you these remarks; and we shall, with your permission, attempt to throw out some suggestions that may be of use.

First, then, we would remark that we think it is generally admitted that all collieries, without exception, ought to be inspected at least twice a year. Well; we have, then, a number of Government Inspectors, who enjoy ample salaries—about 600*l.* per annum, we presume—and they have each a certain district to inspect, containing in round numbers 300 collieries. Very well. Do they actually inspect those collieries? Oh, no! We are told every day they cannot do that, there are too many places. What, then, do they actually perform? Any reasonable man would fancy that they would inspect as many collieries as they possibly could per annum. But this they do not attempt—at least, those that we are acquainted with do not. How they really do spend their time we cannot possibly make out—all we do know is, that they attend at a colliery *after an accident has occurred*. Is this, then, their sole duty? Certainly not. And we would remark; that surely this abominable state of things will not be allowed to continue much longer. Why do not they inspect four collieries per week, at least? If Government Inspectors are to be of any service in carrying out the intention of the Act, this they must do. How many of the present men occupying those offices *can or will do it?* We are acquainted with some of them, and they are clever men, but it is quite absurd to suppose that they will descend "nasty, beastly holes" two, three, or four times per week. They will not do it; and some of them cannot do it; the thing is physically impossible, as some of them are *too old* to perform such arduous duties, and some are *much too fat*. They are, in fact, head-keepers, or managers, and they have mistaken their vocation altogether when they became Government Inspectors. But the large salary attached to the office has done this. Is it really necessary that they should have very high scientific attainments? We venture to suggest that good and efficient men could be got for 300*l.* per annum, who would actually inspect the collieries, which alone can be of real service. By this arrangement double the number of men could be had for the same outlay as at present. Let a system of competitive examinations by competent Government officers be established, and we doubt not that men will be found who will pass muster at even less than 300*l.*, who will personally inspect 150 collieries per annum, twice. This is simple enough. But we would ask again, why do not the present Inspectors engage an assistant? Can they not afford to give 150*l.* a year out of their large salaries to some poor fellow to assist them to get through their neglected duties.

In conclusion, we would remark that one Inspector-in-Chief, with a salary equal to the present officials, with *twice the number* of present Inspectors under him at 300*l.* per annum, would, we submit, effect a vast improvement in the present system. Or, another idea we will mention—Why not pay them according to the work done?—say, a fixed sum for each colliery inspected. We all know the necessity that exists to have collieries worked by the piece; apply the same rule to the Government Inspectors.—Dec. 20.

ACCOLIERY AGENT.

## COAL OIL—ENGLISH AND AMERICAN COAL INTERESTS.

SIR.—It is well known that cannel coal can be made to yield various chemical products of great value to the industrial world, and it appears that in America the subject is receiving even more attention than in Great Britain. An interesting letter has been addressed to the Secretary of the Ohio State Board of Agriculture, with reference to the manufacture of coal oil and other products from cannel coal. The manufacture of oils for illumination and for lubricating, from coals, as commercial products, is, he remarks, of recent origin, and limited to the last five years—mainly, indeed, to the last two years; but, though yet in its infancy, enough has been learned and developed to place it in a high rank amongst the valuable gratuities prepared in Nature's great laboratory for our wants and comforts. By common processes, cannel coal yields benzole, a light and highly inflammable substance, used largely in the arts, and in the portable processes of manufacturing gas; next in order we get the burning, or illuminating oil, being a mixture of the benzole and the unctuous or fatty portions of the oil; next, an oil admirably adapted for wool in the picking and carding processes, its properties tending to dissolve the grease and dirt so intermixed with all our fine wools; next, the heavy or lubricating oil for machinery, which, as it runs from the stills, is mixed with paraffine, a substance in its nature and appearance corresponding with the best sperin and white wax. These products are in varying proportions in different coals, and no general standard either of average product or the specific results could be made, the coals in the same vein frequently changing materially their quality in a few feet. Most coals yield a large quantity of strong ammoniacal water, a product of great value to agriculturists. This, with the coke, ends the chapter of products, all being available for use.

In Central Ohio there are as rich varieties of the cannel coal, and as fine deposits, as exist anywhere in the world; and it is estimated that in the counties of Licking, Coshocton, Muskingum, and Perry, there is an area equal to ten square miles underlaid by cannel coal and shale to the average of three feet thick. This would give about 4500 tons to the acre, or 307,200,000 tons to the land alluded to, and estimating the average value at 2*l*. per ton, it would be worth upwards of 5,000,000*l.* sterling, and, if manufactured into oil, and made to yield (as it may be) 30 gallons to the ton, it would give 9,360,000,000 gallons, which, estimated at 2*l*. per gallon, would be worth the enormous sum of 1,200,000,000*l.* These figures will look extravagant and visionary to most readers, and will prove a practical illusion to those who act upon them, as affecting the value of their real estate in this day and generation, except in favoured localities, where the facilities of transportation and manufacture are very good; and then it must be limited, as a few acres of good coal will last an extensive factory many years.

Many individuals and companies are engaged, or engaging, in the manufacture of the products of cannel coal, and some expect the business will be overdone, and shorn of all the advantages it now offers as a speculation. To many this expectation will be realised, whilst to others who best understand the processes for refining and deodorising the oils, and who skillfully manage their financial matters, there is a fruitful field to harvest before them. No substance has ever been used for lubrication that more fully realises the wants of the mechanical world when properly prepared for that purpose, and it can be afforded at a much less price than any of the good oils heretofore used. For illumination there is nothing but gas that can compare with it for brilliancy; and on the score of economy it takes precedence even of gas. Messrs. Dille and Robinson were the pioneers in the business in Central Ohio, and they have struggled up against prejudices, and against the difficulties that beset a new and truly mysterious business, till they are now preparing for market weekly from 2000 to 2500 gallons of the various oils. The Great Western Coal and Oil Company, of Newark (Ohio), are just completing their works on a large scale, and will shortly be able to furnish from 3000 to 4000 gallons per week. And the Newark Coal-Oil Company are preparing to make from 1500 to 2000 gallons per week, making an aggregate for the three establishments of from 6000 or 8000 gallons per week, or of from 300,000 to 400,000 gallons per annum. This seems like a large amount, and as if it would overstock the country, yet the statistics show that Cincinnati alone manufactures more than five times that amount of lard-oil annually.

The report from which the foregoing information is gleaned being that of a practical manufacturer, it may be presumed that the figures are in every way reliable; and it would certainly appear, that if in the United States the manufacture of mineral oil is deemed worthy of so much attention, the industry should be more fully developed in England than it has hitherto been; and that there is an ample field for the investment of capital in this direction, and fair prospects of a good remuneration.

In the United States the question—Are coal-oils explosive? has been

raised; but I think it must be admitted that coal-oils of ordinary purity are not explosive; it being only when they are adulterated with alcohol that the slightest danger is to be apprehended.

ONE WHO CONTRIBUTES IN THE HOPE OF ACQUIRING.  
Manchester, Dec. 22.

## THE COPPER TRADE—THE SMELTERS.

SIR.—The old cry of copper monopolists is, it seems, never destined to be red-taped. The ever-recurring explosions, with the mangled bodies of the victims; the despairing cries of drowning wretches who perish miserably in inundated pits; cry aloud for enquiry as to the cause of the almost utter failure in the working of a wise and good Act of Parliament. It is impossible that it can be a pleasant duty for a journalist to publish such an article as that alluded to; but it is, we think, the duty of all in any way connected with, or interested in, coal mining, and on all men possessed of a spark of philanthropy or humanity, to exert themselves to discover, if possible, the cause of such an awful state of things; and also discover, some remedy. It is with this view we send you these remarks; and we shall, with your permission, attempt to throw out some suggestions that may be of use.

First, then, we would remark that we think it is generally admitted that all collieries, without exception, ought to be inspected at least twice a year.

Well; we have, then, a number of Government Inspectors, who enjoy ample salaries—about 600*l.* per annum, we presume—and they have each a certain district to inspect, containing in round numbers 300 collieries.

Very well. Do they actually inspect those collieries? Oh, no!

We are told every day they cannot do that, there are too many places.

What, then, do they actually perform? Any reasonable man would fancy

that they would inspect as many collieries as they possibly could per annum.

But this they do not attempt—at least, those that we are acquainted with do not.

How they really do spend their time we cannot possibly make out—all we do know is, that they attend at a colliery *after an accident has occurred*.

Is this, then, their sole duty? Certainly not.

And we would remark; that surely this abominable state of things will not be allowed to continue much longer.

Why do not they inspect four collieries per week, at least?

If Government Inspectors are to be of any service in carrying out the intention of the Act, this they must do.

How many of the present men occupying those offices *can or will do it?*

We are acquainted with some of them, and they are clever men, but it is quite absurd to suppose that they will descend "nasty, beastly holes" two, three, or four times per week.

They will not do it; and some of them cannot do it;

the thing is physically impossible, as some of them are *too old* to perform such arduous duties, and some are *much too fat*.

They are, in fact, head-keepers, or managers, and they have mistaken their vocation altogether when they became Government Inspectors.

But the large salary attached to the office has done this.

Is it really necessary that they should have very high scientific attainments?

We venture to suggest that good and efficient men could be got for 300*l.* per annum, who would actually inspect the collieries, which alone can be of real service.

By this arrangement double the number of men could be had for the same outlay as at present.

Let a system of competitive examinations by competent Government officers be established, and we doubt not that men will be found

who will pass muster at even less than 300*l.*, who will personally inspect 150 collieries per annum, twice.

This is simple enough.

But we would ask again, why do not the present Inspectors engage an assistant?

Can they not afford to give 150*l.* a year out of their large salaries to some poor fellow to assist them to get through their neglected duties.

panies has been the cause of all this. If this be true, the old companies must during the many years some new works existed have lived not by the profits, but by the enormous losses they suffered; or, on the other hand, from their longer experience in the trade, they were enabled to send copper into the market at a less cost than the new-comers could. This is a hard conclusion to come to, yet it is the only one. If it is not, let those who fix smelters' profits at so high a rate as 40*l.* per ton come forward, and show how, with so great a margin, and with improved plans of working, by which they saved nearly the whole of the manufacturing expenses incurred by the old companies; let them come forward and prove how, with these advantages, they could not during the two or three years of their existence compete with the old houses. Smelting at others a fortunate position is not the way to prove one's superiority; in this practical age we require something more tangible.

Are we then to take it for granted that copper smelting is incapable of improvement? By no means; but all parties who make the attempt will do well to approach the subject studiously, and not as most new examiners do—advance to an easy conquest, to reform a long-neglected branch of our commerce, glad that the task has fallen to their lot. That man who fancies all his predecessors in any art were blind, that they followed certain lines of action without any reason whatever for so doing, is pretty sure to find out ere long that he has himself something to learn.

In copper smelting, at the first examination, we are very apt to be deceived, and it is only after long practice that we see the *rationale* of the mode of working. We must consider, in explanation of the long process pursued, that in extracting copper from its ore it is not extracted, as most other metals, from one containing little else but copper, but that copper has to be reduced from an ore of copper, tin, arsenic, iron, &c., and that all these metals have to be separated from.

Copper smelters are accused of being opposed to all innovations; this is correct, if by it is meant that they have an objection to see their works upset from one end to another to give place to a new plan of working, of the success of which they are extremely doubtful; but if by it is meant that they are unwilling to give any scheme of improvement a trial, nothing might be enumerated. Partial success has attended some of those experiments, but nothing has been attained which materially altered the previous course of working. Mr. Hussey Vivian refers to this in his Lecture on Metals, delivered last week at the Royal Institution in this town. He says, "Notwithstanding innumerable trials I have found no plan which will effectually replace the old one;" and his want of success has not arisen from the non-employment of talent, both theoretical and practical. Copper ore buying, and copper smelting, have a publicity not to be found in any other trade, and the magnitude of the interest involved brings a host of critics forward, who act as critics having a certain end in view always do—ignore all the extenuating circumstances in the smelters' favour, and push forward all the blackening evidence they can find. If a depression in the trade takes place, and a nearly total non-sale of copper ensues, smelters cannot reduce the price without being accused of *aliter views*; if a change in the standard of ore is reduced, copper monopolists are making enormous profits at the poor Cornish miners' expense; and if from great competition in the market the price paid for ore is very high compared with the price of copper, the cry comes from new smelters that the sole object is to cut them out from the trade. In fact, steer how they will, act in the miner's favour or against him, the unfortunate body of smelters are always trying to overreach some class, to grapple by unfair means more than their due. For the last few months the standard of ore purchasing has been high beyond precedent, and profits, instead of being 40*l.* per ton of copper, will not reach a sum sufficient to pay a low interest on the capital embarked. People, after all, may be reasoning on false premises. The emoluments arising from smelting may, now there are so many in the trade, be very far from the fabulous sums set down by outsiders. We hear a great deal of the fortunes made by the heads of the large houses, and this is adduced as a proof of the profits, made; but if we compare those fortunes with those realised by other capitalists—bankers, iron smelters, and others—we find that they are not so outrageously large.

Mr. Michael Williams died possessed, it is said, of above 1,000,000*l.*; but it must be remembered that he was fortunate not only in his copper smelting speculations, but in a hundred other things, mining included. Now, to what are we to ascribe the non-success of many of the adventurers in smelting? The chief cause is very lucidly set forth in an article in your last week's Journal; and another cause lies undoubtedly in the reckless application on the large scale of new methods. The loss arising from this is often very enormous. The cost of constructing a copper works is great, and if the works be failed to carry out a patent, and, when this turns out a failure, is pulled down for a modified arrangement, and again and again for re-arrangements, we may easily learn where the money goes. In conclusion, let us state that the unity among the old smelters is far from being so cordial as is supposed, and exists more in the imagination of mining speculators than in reality.

Swansea, Dec. 21.

## THE SOUTH EUROPE MINING COMPANY.

SIR.—The report, in your last week's Journal, of the first meeting of this company seems to me to be generally important in two particulars—firstly, as furnishing additional evidence that the directors of mining companies are now more communicative to their shareholders than was their custom a few years back; and, secondly, as containing a true and graphic account of the mineral riches of Southern Spain and Portugal, and also clear and valuable directions as to where they are to be found by all who may wish to obtain them.

I do not intend to trouble you with an expression of my sense of the candour and magnanimity of the directors in publishing so excellent and so generally useful a report, not doubting but that they have earned for themselves as well the confidence and support of their shareholders—a reward now-a-days of no ordinary importance—as also the good wishes of the mining public.

But to the immediate object of this communication—that is, a word or two about the geological condition of the country in which this company's mines are situate. The report states that, "from investigations lately made, the Rio Tinto Mine has ceased to be that isolated and exclusive mine it was until recently reputed, it being now notorious that it forms but a small part of a *zone of copper ore*, ranging some 36 leagues through the provinces of Huelva and Seville, and cropping out powerfully at Granada, in Portugal." Now, Sir, so recent a discovery is a very severe censure upon Spain and Portugal, for doubtless those nations should be fully acquainted with, and should not for so long a time have neglected the enormous mineral wealth that their southern provinces contain; and, worse than all, should not, to the detriment of their own people, have allowed foreigners to enjoy the honour and wealth of developing them. But allow me to turn from censure, in order to consider the important statement, that *there exists in civilized Europe a zone of copper some scores of leagues in length, and thousands of metres in width*. Such an avowal certainly seems more than incredible—almost fabulous; and the mineral deposit is, as a geological phenomenon, I may say without a known parallel. I have read of lodes being traced for many miles, and I freely admit that some extraordinary ones are ascertained to extend for the length of a score or two; but here we have a startling fact, new to science—the existence of a deposit of rich ore, containing 4-167 pure copper, 41-800 iron, and sulphur 49-838, extending for *scores of leagues* in length, and *thousands of metres* in width. A fact so singular and so valuable affords scientific considerations worthy of the attention of a Humboldt, and commercial intelligence which I am sure will not be neglected by the mining capitalists of this country.

This wonderful discovery, for it is nothing less, shows that there exist in the Iberian peninsula inexhaustible deposits of copper, iron, and sulphur, three natural products the most concerned in contributing to the wealth, civilization, and happiness of mankind; for, although the company's report leads to the supposition that it is proposed to produce copper alone, yet it seems to me that as an iron ore as well as a source for sulphur their deposit is equally valuable, and equally deserving their attention.

I notice with astonishment the statement of the wonderful riches of the Government Rio Tinto Mine, *ninety million pounds sterling of copper in eight!* But I pass it by, in order to speculate upon the causes that have led to the deposition of this enormous mineral zone. I suppose all philosophers will agree with me that the porphyry has, by volcanic agency, been upheaved through the superincumbent kilas, and then by the simultaneous, or it may be a subsequent, action of the same volcanic agency, the cupreous deposit, whilst in an incandescent state, has been infiltrated from below into the interstices formed between the porphyry and the kilas by the displacement of the latter during and by the upheaval of the former,



I leave it to the calm consideration of all parties interested, whether the course adopted by the shareholders in making a call to cover their liabilities was not a judicious and sound one.

As to the legality of the meeting, I am not competent to judge; but shall be obliged by Mr. Berry's informing the shareholders, through the medium of your columns, whether the Stannaries Court has power to dissolve a company, and thus prevent the shareholders meeting, and passing such resolutions as they may think proper.

It is a matter of the greatest possible indifference to me to whom the call is paid, or if it be ever paid at all. There are liabilities which must be met, and it is of equal indifference to me whether they are discharged through the medium of the Stannaries Court or otherwise.—28, Queen-street, Cheapside.

ALFRED JEFFREY.

## Meetings of Mining Companies.

### ROSSIE AND CANADA MINING COMPANY.

A special general meeting of shareholders was held at the company's offices, Pinner's-court, Old Broad-street, yesterday—Mr. W. Cox, M.P., in the chair.

Mr. PEMBERTON (the secretary) read the notice convening the meeting, and the same was declared duly constituted.

The CHAIRMAN said he was very sorry to have been compelled to call that meeting, but the directors felt that the time had come when, in consequence of repeated disappointments, they deemed it right to cease any further expenditure. The great indications they had at starting had not held good. There were three places in the Victoria Mine which had produced  $2\frac{1}{2}$  tons to 1 ton to the fathom, and Mr. H. Thomas held out most favourable prospects, and he recommended that the shaft should at once be sunk down another 15 fms., and to drive a level east and west, from which he anticipated that a large quantity of ore would be raised—something like 400 tons. But when they had gone down they found there was hardly an ounce of lead; therefore, in every respect their anticipations had been unrealised, and he could see no ground to justify any further prosecution of the works. The directors thought it advisable that the expenses should be stopped, and, if possible save something out of the wreck. Unfortunately the same thing had occurred in the Bass Mine. Here it was thought they had a good mine, for there was a late production of which was from 2 tons to 4 tons to the fm., so that they were enabled to carry on their works some considerable time by the production of the stopes, without any money being sent from this country. When they were discussing the propriety of sinking another shaft and driving another level, it was suggested that it would be a great deal better to sink on the lode itself to obtain as much as they possibly could without sinking a shaft or driving a level. They were right in adopting this suggestion, for they obtained some quantity of ore, and the lode for some time remained good, producing  $1\frac{1}{2}$  tons to 2 tons per fm.; but, on going down, the lode ceased in part, with every indication of it ceasing entirely if the work was further prosecuted; they, therefore, deemed it expedient to discontinue any further proceedings. And, if they had, as he himself had wished, resolved upon this course two or three months ago, money would have been saved. Now they had not in either mine a place where they could obtain 1s. worth of ore for less than 2s. cost. A report had that day been received which stated that the bottom level in the Victoria Mine measured 1 fm. 8 in., and was set to six men, at 100 per fm.; this end was now east of the engine-shaft 13 fms. 1 ft., the lode still poor, and the ground extremely hard. Therefore, to his mind the mines had been tried and had proved a failure, and the only course was to wind-up the concern. He would, therefore, propose—"That the company and the affairs thereof be wound-up."

In answer to a question, the CHAIRMAN stated that the assets, exclusive of stock, were about 800*l.*, and they owed about 1100*l.*; therefore, if 300*l.* could be obtained for the machinery there would be no necessity for another call.

Capt. MACKINNON having seconded the resolution, it was put, and carried *mem. dis.*

Mr. STUART enquired whether the opinion of the majority of the board of directors was similar to that expressed by the Chairman?

The CHAIRMAN said there were two directors whose opinion was somewhat at variance with his own.

After some conversation, it was proposed by Mr. STUART, seconded by Mr. PARRY, and carried,—"That the directors be authorised to sell the engines, plant, and stock in America to such person or persons, at such price or prices as may be desired."

In answer to a question from Mr. Parry, the CHAIRMAN stated that if after every disbursement had been discharged there should be any assets they would be divided *pro rata.*

It was then resolved that the meeting to confirm these resolutions should be held in a fortnight hence.

A vote of thanks to the Chairman, for the lucid manner in which he had explained the state of affairs having been unanimously accorded, the proceedings terminated.

### CARVATH UNITED MINING COMPANY.

A special general meeting of shareholders was held at the company's offices, Austin-friars, on Saturday, Mr. CUNDY in the chair.

Mr. W. CHARLES (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed. The accounts showed—

Capital	£19,270	0	0
Tin ore	6,104	2	10
Copper ore	200	14	3
Interest	61	10	7
Materials	33	14	9
Purser's advance	6	13	0
Discount	4	18	7
	$\text{£}25,681$	14	0
Leases of mines, machinery, &c.	£10,011	17	6
Labour cost	9,406	15	1
Merchants' bills	4,692	18	8
Dues and rents	688	4	4
Sundry bills	388	7	0
	$\text{£}25,088$	2	7

Leaving balance in favour of mine ..... £ 593 11 5

The balance of liabilities over assets was 388*l.* 1s. 10d. The following report, from Capt. R. Hancock, was then read:—

Dec. 17.—The lode in the 50 west is not so large as it has been, but is still producing tin work; I think it will soon increase in size. The lode in the east end in this level is poor at present, but producing some tin. The lode in the 40 end is still looking well, and producing good work; if it maintains its quality as at present the mine will do well. One of the stopes in the back of the 50 is not looking so well at present. The other stopes are producing as usual. In the eastern ground, the lode in the eastern adit has been opened on about 100 fms. in length by the old workers, and the lode worked away in the back in different places, which has produced some rich work. We stopped a place of lode in the back of the adit, which made a produce of 900 lbs. of tin per 100 sacks. We sunk a winze about 8 ft. under this level, on the course of this lode, which was from 2 to 4 ft. wide, and produced work worth 500 lbs. of black tin per 100 sacks. The ground is easy for driving, but we could go no deeper without pumping power, and were obliged to stop. All the machinery and other operations are going on well.

The CHAIRMAN, in answer to a question from Mr. Mackean, stated that the mine was very much in the same position as at its starting, as there had been very few changes among the shareholders. It had been stated to all the original shareholders that they would have to pay for the sets, machinery, buildings, and for a certain contract (which had been fully performed), a sum of 10,000*l.*, and those gentlemen who had since become shareholders were fully informed of that fact by prospectus at the time the contract was made. It was the original contract with the promoters of the mine that the shareholders were to pay to this sum, to have the mine put in a certain order, of which they at the time expressed themselves fully satisfied. Out of the 6400 shares in which the undertaking originally stood, 2725 had been relinquished, which left 3675. It was, then, necessary for them to determine upon a scheme for the future operations of the mine, to raise funds, and to determine upon the mode in which funds should be raised for that purpose. With respect to their future operations, a plan had been proposed, which was to sink from the 50 to a 60 fm. level, by nine men; to prove the east ground by ten men; to drive the 40 west by three men; to drive the 50 west by four men; the 50 east by four men; and to drive the cross-cut north by four men, which would make a total of 34 men. The cost per month would be from 350*l.* to 370*l.*, and they considered that the monthly returns for the first quarter would be about 200*l.*; after that period they had every reason to hope it would increase.

Mr. Mackean had received a letter from a gentleman whose name stands high as a mining agent, and who was also a shareholder in the Carvath Mines. The letter stated that he (the writer) had no objection to pay his shares, provided all the others were taken up. It would be wise, the letter proceeded to state, to resolve upon sinking the shaft with all possible speed, but no good, it was apprehended, would accrue from driving the upper levels. The mine was unquestionably deserving of a further trial. He (Mr. Mackean) would make no comment upon that letter, as he was not a practical miner.

Mr. WEST thought they ought either to fully carry out the work, or to put up a trial engine, and go down 20 fathoms in the eastern part of the mine. At the same time, however, they should be prosecuting their work in the western mine. He believed by so doing a much better and brighter phase would be thrown upon their prospects, for they were at the present time in a good stratum of ground, and great indications were shown that there were "mores" of tin going down: 500*l.* would effect much in that part of the mine. Were this course adopted he would at once take all his shares; he would lend them an engine of 15 or 16-horse power for a nominal sum, and do that lay in his power to speedily effect the desired end. He believed in 18 fms. they would raise tin enough to pay the whole of the cost.

Mr. MACKEAN was very much inclined to prosecute the development of the mine in every part vigorously. The committee of management were, he supposed, no more practical men than he was himself, and, therefore, they were compelled to take the opinion of those who were able to judge—such as Mr. Charles and Mr. West.

Mr. CHARLES observed that, when in Cornwall, he gave his very best attention to the affairs of the mine, and was ably supported by Mr. West and Capt. R. Hancock. When on the mine he had the good fortune to meet with a gentleman whose reputation stood high in the mining world. This gentleman agreed with their scale of operations, and his last words were—"Whatever you do in Carvath, do quickly; carry on the work with vigour." With regard to the western mine, he would say that they should look at it fairly, and they would find that, even in the present form of working, 12 men had produced 160*l.* worth of tin per month, and the tin raised by these men had paid the whole of the labour costs—all the dead charges of the mines, and, in some instances, even part of the merchants' bills. Therefore, were there a sufficient extent of ground open, there could not be the shadow of a doubt that the western part of the mine would pay. Before, however, they could work their mine fairly they must drive their levels and sink winzes. Seeing that the western mine had produced tin enough to pay the labour cost for three months with a contracted scale of operations, he was of opinion that they were in possession of a valuable property. The mine had not been proved; and it was for the shareholders to determine whether they would give up their mines only half proved, or proceed in their development until they had fairly ascertained their worth.

Mr. MACKEAN thought there was no intention of forsaking their mines, and, therefore, the money was the only thing in question.

Mr. BARKSDALE observed that a question had been raised as to whether it would be advisable to spend the money when raised upon the east and west mines, or to spend it exclusively upon only one portion. As he fully believed every inch of ground would tell in working both the eastern and western portions, he was anxious that the money should be expended upon both portions at once.

Mr. WEST was of opinion that they would raise more tin in 10 fms. of the eastern part of the mine than in the western part, but 500*l.* would show all they desired to know. The mine could be tried in three months.

After some discussion, it was resolved "That the undertaking in future stand in 3675 shares, being reduced from 6400, by the relinquishment of retiring shareholders, and that 1885 shares were thereby cancelled from that day."

The committee of management were re-elected, with the addition of Mr. Mackean. A call of 10*l.* per share was then made, payable in two instalments—on January 12 and March 12.

Mr. MACKEAN, in advertizing to the future scale of operations, suggested that, as they might see cause to abandon the further prosecution of the plan they then adopted, it be left entirely to the committee.

Mr. CHARLES observed it would take quite three months before they could arrive at any conclusion.

It was then put from the chair, seconded by Mr. DUNKIN, and carried *mem. con.*—"That the scheme for their future operations, as proposed, be adopted, and that the committee be empowered to carry the same into effect without delay."

A vote of thanks to the Chairman terminated the proceedings.

### NANTEOS AND PENRHIW MINING COMPANY.

An adjourned meeting of shareholders was held at the company's offices, Bishopsgate-street, on Tuesday.

Mr. W. STUART in the chair.

Mr. MURCHISON (the secretary) read the report of Capt. J. Roach, received this day, as follows:—

Dec. 20.—I was underground in these mines last Saturday; my report thereon I beg respectfully to submit. The lode in the 20, east of Penrhiew's shaft, is 6 ft. wide, consisting of quartz, sulphur, and spots of lead ore, from which a great deal of water is issuing; although there is not sufficient ore to value at present, the lode is very promising; a character, therefore improvement in quality may be fairly expected. The rise above this level continues hard; the lode produces a small quantity of ore, about 4 cwt. per fm.—North Lode: The 20 cross-cut, driving north from Bwlch-gwyn shaft towards this lode, has passed through several branches, all containing lead ore, and all dipping north towards the lode; this is very favourable. The lode in the 30, driving east of cross-cut from Bwlch-gwyn shaft, is 3 ft. wide, worth for lead ore 9*l.* per fm. In the same level driving west of cross-cut the lode is 4 ft. wide, of highly promising character, at present worth 9*l.* per fm. for lead ore. All the other cross-cuts driving to intersect this lode, and which were described in my last report, are progressing satisfactorily. The tribute department is without alteration, therefore the usual quantity of ore is being raised.—Eysturnian: Nothing new since last reported. The rise is still worth from 10*l.* to 12*l.* per fm. Latterly the men have been employed driving a cross-cut from the main adit to the north lode for ventilation; this will be accomplished in a day or two, when the rise will be resumed. The lode in the deep adit driving east is still composed of sulphur, with small quantities of lead ore interspersed. The fixing of wood pipes and foot-road to go up to Eysturn's level is nearly complete. The wheel-pit is finished, frame laid thereon, and the wheel is in course of erection. The house for the crusher is now in course of building. All other work connected with the incline and dressing-floors is being done as fast as possible.—JAS. ROACH.

Mr. BETTS suggested that in future the reports should give the quantity of ore per fathom at each point.

Mr. MURCHISON (in answer to a question) stated that the wheel-pit was finished, and the wheel was in course of erection.

After some conversation, Mr. MURCHISON said that at the last meeting certain shares were forfeited, but subsequently the whole of the calls and interest thereon were paid. It was then resolved,—"That the calls on the shares forfeited at the meeting on Dec. 8 inst., having since been tendered to the secretary, such shares be disposed of by restoring them to the respective holders; and that the secretary be authorised to receive the calls and interest thereon, and place them to the credit of the respective parties."

A vote of thanks to the Chairman terminated the proceedings.

### TO THE ADVENTURERS IN ASHBURTON UNITED MINES.

It being now near the close of the year, and about 12 months since we commenced operations, a summary of the progress made during the time may not be out of place. We, therefore, beg to state for your information that we have erected an excellent engine-house, and fixed in it a powerful and efficient engine, with capstan, shears, &c., complete. We have also erected two excellent stamps, with 32 heads attached, and laid out the dressing-floors and burning-house, built three horse-whims, and laid down 300 fms. of tramroad. A smith's shop has also been erected, and above 140 fms. of shafts cleared and timbered, and a mile of levels, with all other necessary work consequent in carrying out an extensive mine. The engine commenced working about two months since, and we have dropped our lifts and got the water in fork to within 8 fms. of the bottom of the mine; indeed, we hope to get the mine dry in a few days, when we shall commence clearing the bottom levels, to enable us to set the bottom pitches, from which, in all probability, we shall raise remunerative quantities of tin. In accomplishing this, we have spent about—

In machinery and other materials, and in labour in opening out the mine ..... £4709 0 0

In raising 25 tons of tin, and dressing a portion of the same, and making the dressing-floors ..... 615 0 0 = £5324 0 0

In leases, and expenses obtaining same ..... 128 5 0

In rent of water-courses and dead rent ..... 63 0 0

In expenses at meetings, and of parties attending the mine, &c. ..... 48 16 0

Stationery, stamps, printing, and advertising ..... 61 11 0

Commission ..... 41 0 0 = 342 12 0

Making the total expenditure to the end of October ..... £5666 12 0

By the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

Tribute and dressing, &c. ..... 615 0 0 = £5324 0 0

Against this we have an engine, with house, pumps, and other erections, which have cost ..... £2000 0 0

Stamps, whims, with running materials ..... 1000 0 0

We have also 25 tons of tin to the end of December, all taken from above the adit, which is worth ..... 1750 0 0 = 4750 0 0

Leaving the sum as sunk in opening out the mine ..... £ 574 0 0

By adding to this the expense of water-courses, meetings, stationery, and commission, &c., the sum of ..... 342 12 0

It will be seen that we have only sunk altogether ..... £ 916 12 0

From the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

Leaving the sum as sunk in opening out the mine ..... £ 574 0 0

By the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

Leaving the sum as sunk in opening out the mine ..... £ 574 0 0

By the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

Leaving the sum as sunk in opening out the mine ..... £ 574 0 0

By the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

Leaving the sum as sunk in opening out the mine ..... £ 574 0 0

By the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

Leaving the sum as sunk in opening out the mine ..... £ 574 0 0

By the foregoing figures, it will be seen that the actual expenditure in labour and money is but ..... £4709 0 0

been) biased by prejudice, whilst they cannot be by interest, so long as he adheres to the determination to follow the business of a broker of shares, and never to depart from it to become either a dealer or a shareholder.—*SALUS OMNI.*

From Mr. EDWARD COOKE:—Notwithstanding the dullness usually witnessed at this season of the year, dividend and good progressive mines have been in active demand during the week. The rise in the price of copper, which is generally followed by an advance in other metals, has given a stimulus to the market, in addition to which great improvements have taken place in several of our most promising mines—as, for instance, East Bassett, Wheal Charlotte, United Mines, Condurrow, Lady Bertha, East Russell, Bryntafal. On the 4th inst. we find these mines representing market value in the aggregate about £26,000,000; at the present period the aggregate value of the same is about £25,000,000, thus showing the large profits to be obtained in a short time by a judicious outlay in several mines of established reputation. It would be presumptuous to suppose that all should turn out prizes, but the object of these remarks is intended to show that one mine cutting rich generally repays the outlay on many others. The writer's experience has convinced him that heavy losses in mines can be avoided by a proper selection and a reasonable amount of attention by a broker to the interests of his clients. There are periods and phases in this, as well as in other markets, when mining shares should be bought or sold; and, whether for investment or speculation, operations of this kind are as legitimate as railways, or shares in steam companies, &c., and certainly not attended with their heavy liabilities to compensate for which the most flourishing of them pay a very small percentage, when compared with South Cardigan, Devon Great Consols, Wheal Mary Ann, South Frances, Minera, Phoenix, and many other mines, which are paying regular dividends at the rate of 12½ to 20 per cent. The only risk attending the most unprosperous British mine is that of the original outlay, together with a proportionate amount of the actual working costs on the interest held. By the payment of the latter, shares in cost-book mines can at any time be relinquished. We are only supposing an extreme case, which, with ordinary care, can always be avoided. It is the fear of this, where really no reason for it exists, that, no doubt, deters many from embarking in mining adventures. Another reason (and it too frequently occurs), that parties who have lost their money by speculating recklessly in other concerns, attribute their misfortunes to adventuring in British mines, when, from enquiry, it has been found that their names were never known to any broker or dealer on the market. These circumstances are we verily believe had the effect of bringing into disrepute one of the most important branches of the nation's wealth. But with all this, mines are worked, and, in numerous instances, with enormous profit to the parties engaged in it. There are many now on the verge of paying dividends that can scarcely fail to be productive of large profits to those who are disposed to give this class of security a fair trial by an outlay of their capital. Everything seems favourable for a prosperous year in 1859, and, no doubt, there will be a rush for investments of all kinds at its commencement. We would, therefore, suggest an outlay now, and not wait until everyone wants to buy. With these few remarks on a subject which the writer feels himself quite inadequate to do full justice to, he wishes his friends a more prosperous new year in the coming one than the present has been to all those who have been engaged in commercial and mining pursuits.

#### SUCCESSFUL MINING OPERATIONS IN FRANCE.

##### BANQUET GIVEN TO MR. RICHARD TAYLOR, AT PONTGIBAUD.

Mining has its heroes. It is not a mere brilliant exploit however performed, nor any success however great obtained by a happy concurrence of circumstances, that makes the hero of the mines. It is not the empiric who treats nature as one great hazard, and depends for success more on luck than on the intelligent use of means, on whom miners bestow such an honour. He is the hero of miners who loves mining, and befriends it; one who sees it from a higher than ordinary stand-point; who comprehends its position and destiny; who elevates it in the rank of industrial enterprise, and among the economical sciences; who extends its power and strengthens its influence.

The Messrs. TAYLOR, under whichever of these aspects they be viewed, are incontestably the men of the miners. They have contributed, and do contribute, as much, or perhaps more, to the real advancement of mining, and are more generally looked up to as miners, than any three gentlemen in the world. They are distinguished for their bold and comprehensive views of mining: for its service they lay all the sciences under contribution, and they can lay claim to numerous most important inventions, of which mining will ever feel the benefit. For extending its influence they are among the foremost. The transforming power of their hand is known, and their authority acknowledged in almost every part of the habitable globe. Wherever they establish themselves mining, before imperfectly understood, receives almost another form of existence. Their perseverance is indomitable, and their self-possession and resolute determination in time of difficulty, those who have been with them at such times can best tell. Paragon of masters, and the best of employers, the subject of this banquet lives in the affections of his agents, and is blest by the thousands he employs.

It will no doubt gratify our brother miners in England, and the friends and acquaintance of Mr. Richard Taylor, to hear of the compliment paid him by our generous allies the French at Pontgibaud, joined by the English of that place. A few days ago a desire was manifested on the part of the French to give some proof of their esteem for this gentleman: this desire, which was quite spontaneous, was no sooner made known than the English attached to the mines eagerly joined in it, and they all agreed to have a banquet, to which they would invite him. The committee formed to manage the dinner decided on the 11th as the day for the occasion.

The interior of the building chosen for the day was tastefully decorated with evergreens and flowers, and with various appropriate inscriptions, &c. The exterior was illuminated, and over the entrance, guarded by two gendarmes in full dress, were flying the flags of England and France, and the flag of the town and of the mines. Over these flags was a large, cleverly-wrought transparent tableau, bearing symbolical devices and inscriptions. About six o'clock the booming of cannon announced the arrival of the guests of the evening. We were soon set down to a sumptuously spread table, such as the French

ment of a mine in Devonshire, called Wheal Friendship, when his talents, integrity, and perseverance showed him to the public as among the first of the engineers of the time. His renown soon opened to him a great field of action, and being blessed with two sons like himself, he soon extended his influence far and wide, and gave employ to thousands of families. The labours of these gentlemen have not been confined to England alone; they have taken for their field the entire world. As to their success, I think I can prove that the mines under their direction in Cornwall and Devon alone have given upwards of £2,000,000, to the adventurers. Captain Rickard also justly remarked that, did Mr. Taylor want protection for his person or property, he could draw forces from more countries than most of the potentates of Europe, and certainly he would not lack capitals to head them.

M. N. BONTOUX: "To the Anglo-French Alliance."—To the union of those two great people, whose destinies are so intimately connected, whose fortunes are so alike, that only the most perfect *entente* can serve as a basis for their mutual prosperity. That bond of union, ratified some months since in that admirable seaport, which, far from being permanent menace to England, is another guarantee for the maintenance and stability of peaceful relations between these two great nations, which are uncontestedly at the head of modern civilisation; this compact I say, Gentlemen, is a high manifestation of the Divine will. A noble and magnificent spectacle was that of two fleets moored with the anchor of the alliance, of these heroes of battle-fields and of the seas, become guardians of peace, of those two sovereigns giving each other the hand, and saying to the entire world that from allies they could never become enemies. May God keep us from that calamity, and if, in the impenetrable ways of His Providence, it be written that we must yet meet together arms in hand, may it be as soldiers under the same banners of glory, bravery, and heroism. The 19th century has shown what France and England together can do. May they, then, become more and more intimately united, and may genius and power, exerted in perfect harmony, tend to the good of the entire world, to the regeneration and consolidation of universal progress. Gentlemen, for us who met at this banquet, are come to render a tribute of sympathy and of gratitude to the *homme d'école*, whose name is in our hearts as upon our lips, for us, I say, the fruits of the alliance are a very precious pledge. The future of industrial enterprise—that malapropism of public prosperity—is no longer a doubt amongst us—it is a certainty, as much as one may dare say so. Once tottering, languishing, dying out little by little (allow me the expression), like a lamp dries out for want of oil, industrial enterprise is risen again—firm, vigorous, confident in itself, and advances towards success with a sure step, and will reach it under the *egis* of the alliance. United in our wishes for its duration—*Vive la France! Vive l'Angleterre!*

Capt. THOMAS RICKARD: Gentlemen, if I had a tongue as eloquent as I feel my heart is just now, I might succeed in a becoming manner to the toast so eloquently proposed by Mr. N. Bontoux, and so cordially drunk by you all. Those of the French and English who know how to appreciate the great boon of Providence—the union between the two great nations are mutually proud of it. And truly it would be a political act to tell you, Gentlemen. But it seems to me that the alliance that was only strengthened by that long and terrible trial of the Crimea, that remains intact after the dangers of the *attentat* and of the pamphleteer war, and still remains firm, may with the greatest propriety be called sincere and faithful. But there is one thing that touches us still more closely—is the alliance sincere at Pontgibaud? We have the proof of its sincerity in the banquet of to-day, where French and English eagerly meet to *site* an English gentleman and engineer. And can we need for another proof a better one than the five years' residence of from sixty to eighty English in this town furnishes, during the whole of which time an universal *bonne entente* has reigned. The tricolor and the union jack forming one standard. The French and English united, we have the greatest guarantee for the peace of the world. The French and English of Pontgibaud, the town and the mines united, we have the greatest guarantee for the prosperity of our town and our mines. Yes, Gentlemen, united in heart, and in effort we shall triumph over all our difficulties, and success is certain to us.

M. DUCHEZ: Gentlemen, not long ago, upon a shore far from this place, manœuvred two armies—one English and the other French; those armies were called to lay siege to a town of a hundred forts—the proud Sebastian, covered by the numerous battalions of the Russian empire, under the command of able chiefs. Our armies, too, had at their head chiefs of ability, and, above all, of honour. The two nations produce none of any other kind. But none of them had yet been placed in one of those important positions which reveals those privileged men to whose care destiny is pleased to chain victory. Notwithstanding the bulwark of Muscovite honour, the redoubtable Sebastian, is fallen. Gentlemen—the members of this meeting, for the most part, at least, in one way or another, are under divers grades, and in arms of different natures—the soldiers of our *industrie*; those soldiers are all English or French; their army recruited from among the brave fellows of the mountains of Auvergne, have manœuvred for the last five years in order to bring to good issue the siege of the Pontgibaud Mines. Are they, then, impregnable these mines? Impregnable! but I forgot myself; the word is neither French or English. Have not the besiegers at their head a general who has come out victor in twenty battles? one of those men whom judicious England ranks among the heroes of her *industrie*. Is it not true, our brave Capt. Rickard, that, inspired by Mr. Taylor, you will bring us one day into the heart of the stronghold, whatever may be the precautions that Nature has taken to mask it, had she even buried it a thousand feet underground? That day is not far off; believe the presentiment that animates the most obscure soldier of our army. Let us, then, close in around our general, and rally again at the cry, before which, doubt not, the last rampart that Nature has opposed to our efforts will give way. —Vive Mr. Taylor!

Several other toasts were drunk, and the National Anthems of England and France sung, and thus it joyfully terminated.

#### FOREIGN MINES.

ALTEN AND QUÆNANGEN.—P. Wilson, Nov. 1 to 15: RAIPAS: We have now effected a communication between the stope from Monk's shaft, and the workings under the shallow adit, and now bring the stuff to surface at less expense than formerly. The lode has somewhat increased in size, and is yielding more ore than all the other workings put together. None of the deeper stopes have undergone any marked alteration, the ore raised being still of an inferior quality.—OLD MINE: No. 1 stopes are still turning out a large quantity of ore of fair quality, and there is every prospect of the present good production being kept up for some time. The winze under the stopes has lately not contained quite so much ore, but the lode is still large and kindly, and the ore, though less in bulk, is more free from mud. In the driving between No. 1 and No. 3 winze, from Bergmester's stope, where the lode when we began was completely barren, we have this week entered a new channel of ground, with fine, stones of ore, daily increasing in size and quantity. No. 3 winze has not yet reached the lode, nor will it probably do so while the stope retains its horizontal course; the lode has evidently been headed for a considerable distance westward, till the latter begins to assume the usual inclination of the lode towards the south-west. The small lode in the cross-cut from the shallow adit has dipped below the sole of the driving, and the country remaining highly impregnated with spots and small joints of spar, sandstone, and copper ore, we are induced to believe that the west lode is not now far ahead.—UNITED AND MICHEL'S: There is here no alteration to report: the tributaries are finding sufficient ore to increase their wages, but not at such rates as to leave much profit on the operations.—THOMAS': This mine continues, as it has been since its first discovery, relatively the most profitable of any in Kantjord, though the lode is small, merely a fissure in the greenstone, without spar. The workings are 8 fms. deep, and prosecuted under much disadvantage, the extreme hardness of the country, and the late poverty of the mines, having prevented us from carrying the shallow level up to the lode.—QUÆNANGEN: The main lode here continues equally productive as before, but the severity of the weather prevents the miners working regularly.—QUÆNANGEN: The stope under the 10 having now reached the same horse of ground as divided the lode in the winze, the product is for a few weeks somewhat reduced. The lode in the winze after their junction was 3 feet wide of solid ore, and a few weeks will bring the stope down to the same level. The lode in the winze west from the stope has increased in value from 2 to 3 tons per fm., but the water and the toughness of the ground combine to prevent us sinking more than ¾ fm. monthly.

WILDERBERG.—Z. Walls, Dec. 18: The underground work is proceeding well, and our ore return for the month is likely to be equal with that of last month. The rise in the back of the 19 lachter level, on the Erbthalberg lode, is worth 2½ tons of silver-lead ore per lachter, and the winze coming down on the same lode from the level above is worth 4 tons of silver-lead ore per lachter. The No. 1 sink, going down below the deep adit, on the Dornbergberg lode, is worth 2 tons of silver-lead ore per lachter, and the stopes now at work in the back of the middle level, from the No. 1 sink to the No. 3 sink, are worth on an average 2½ tons per lachter. The No. 3 sink is now 10 lachters below the deep adit, on the course of the lode, and is worth in its present bottom 5 tons of silver-lead ore per lachter. The new pitch which we set last setting-day in the back of the deep adit, west from Michael's shaft, on the Unterhohberg lode, is looking well, and will produce at this time 2 tons of silver-lead ore per lachter.

SOUL EUROPE MINING COMPANY.—El Cerro, Spain, Dec. 6: Yesterday we cut, in the Monte Romero Mine, a valuable vein of ore, containing a considerable quantity of native copper.

FORTUNA COMPANY.—Dec. 13: Canada Incosa, West of the Engine-shaft: The 6th level, east of Addis's shaft, is worth ¾ ton per fathom; the lode is split into branches, that to the north end being the productive one. The 5th level, east of La Gloria winze, is worth ½ ton per fathom; the lode is 1 ft. 6 in. wide, composed of quartz, carbonate of lime, and lead ore. The 5th level, west of Buen Provecho, is worth ½ ton per fm.; there are large streams of water issuing from this end, and we expect shortly to drain the old workings in advance of it. In the 3d level, west of the 4th level, east of Garcia's winze, is worth ¾ ton per fm.; a kindly lode, containing quartz and carbonate of lime. The 3d level, east of Tomas' winze, is worth ½ ton per fm.; the lode is 3 ft. wide, and presents a promising appearance.—Winzes: Clavel winze is worth 1 ton per fathom. O'Shea's winze is not to value at present, and is rather hard for sinking.—Shafts: Henderson's shaft is worth 1 ton per fathom. In Lowndes' shaft the water is drained down, and the sinking will be resumed to-morrow. The masons are progressing with the walling of Carros' shaft, and the men are engaged in putting in a penthouse in Addis's shaft.—Los Salidos: The 3d level, west of Alvin's winze, is worth ¾ ton per fm.; the lode is rather small. The 3d level, east of Martinez, is worth 1 ton per fm.; the lode is 6 in. wide, composed of quartz, gossan, and lead ore. The lode in the 2d level, east of Barruecos', is rather small at present, producing a little ore, but not enough for valuation.—Winzes: Esteban's winze is worth ½ ton per fm., ground rather hard.—Shafts: Morris's engine-shaft is worth 1½ ton per fathom; this shaft is down the required depth for a 4th level. Cologan's shaft is going down on the south side of the lode. The new shaft below surface was communicated to-day to the 1st level.—General Remarks: During the month of Nov. there were weighed to the smelting works 218 tons of lead ore; we estimate the raisings for Dec. at 240 tons. The surface operations are progressing with their accustomed regularity, the weather being favourable.

LINARES MINING COMPANY.—Spain, Dec. 13: Pozo Ancho Mine: South Lode, West of the Engine-shaft: The 85, west of cross-cut, is worth ¾ ton per fathom; lode regular, composed of quartz and lead ore. We have been driving on the cross-course in the 75, west of Carrillo's winze, for some days, and expect in the course of a day or two more to find the lode again. The lode in the 41, west of Warne's shaft, is worth 1 ton per fathom. The lode in the 31, west of Cecilio's winze, is small and unproductive, but carrying a well-defined south wall.—East of Engine-shaft: The lode in the 85, east of Quava's winze, is worth ½ ton per fathom. The lode in the 75, east of Guillermo's winze, is composed of spar and spots of lead ore. The 65, east of Don Juan winze, is worth ¾ ton per fathom. The lode in the 65, west of Fernandez' winze, is small and unproductive, but we expect shortly to cut the main part of the lode. The 65, east of Madrid winze, is worth 2½ tons per fathom; and the 65, west of ditto, is worth 2 tons per fm.; the lode is composed of gossan, quartz, and lead ore.—North Lode: The 65, east of Luis' winze, is worth ½ ton per fathom. The lode in the 65, west of Taylor's shaft, is small, with spots of lead ore. The 65, east of Bantista's winze, is worth 1 ton per fathom. The lode in the 55, east of Bastida's cross-cut, is composed of carbonate of lime, quartz, and spots of lead ore. The 55, east of Gomez' winze, is worth ½ ton per fathom. The 55, west of ditto, is worth 1½ ton per fathom; lode composed of quartz and lead ore. The

55, east of Basto's winze, is worth 1½ ton per fathom; the lode is large, composed of spar and lead ore.—Field's Lode: The lode in the 45, east of Enrique's winze, is large, composed of gossan and quartz, and is unproductive at present. The 20, east of Field's shaft, is worth ¾ ton per fathom; lode regular, composed of gossan, quartz, and lead ore. The 45, east of Antonio's cross-cut, is worth 1 ton per fathom.—Shafts and Winzes: We are now engaged in dividing and casing down Warne's shaft, with some Spaniards and two Englishmen. Taylor's shaft is worth 1 ton per fathom: we have to stop this place, in consequence of the fall of rain of late. Field's shaft is worth ½ ton per fathom. San Jose shaft is worth 1½ ton per fm. The lode in Jaen winze is small and unproductive just now. Castano's winze is worth ½ ton per fathom. Carrasco's winze is worth 1 ton per fathom. Linare's winze is worth ½ ton per fm.; lode composed of spar and lead ore.

PITTSBURGH AND BOSTON MINING COMPANY.—The directors in their usual annual report state their undiminished confidence in the great value of the mineral resources of their property. The period embraced in the report comprise the twelve years' operations at the Cliff Mine, and exhibits, as all its predecessors have done, an increased production of copper. The amount of mineral raised from the mine during the year ending Nov. 30, 1857, was 941 masses, 1,958,181 lbs.; 869 barrels of barrel work, 613,731 lbs.; and 1029 barrels of stampings, 791,645 lbs.—3,263,557 lbs., or 168½ tons of 2000 lbs. to the ton. The net earnings of the year have been \$179,075, out of which the directors have declared one dividend of \$10 per share on 6900 shares, and one dividend of \$5 per share on 20,000 shares; they have, also, paid for additions to furnace property, \$758—\$160,758, which, deducted from the net earnings leaves \$18,317, this, added to the accumulated surplus of previous years shows a clear surplus of available personal effects of \$136,897. In the expenditures of the year are included the cost of two new steam-engines, with all their appurtenant machinery, one to constitute the principal pumping engine located at the Avery shaft, and the other a portable engine now in use at shaft No. 4. The majority of the stockholders of the Pittsburgh and Boston Mining Company being of opinion that it was desirable to adopt efficient measures for the more rapid development of the extensive mining property of the company, and believing that the object could be best attained by the organisation of an independent company, and as a company had been, to this end, duly constituted under the general mining laws of the State of Michigan, as the North Cliff Mining Company, with a capital of \$500,000, divided into shares of \$25 each, it was resolved to convey certain lands to the extent of 1000 acres to such new company upon the following terms.—1. The North Cliff Company to issue to every stockholder in the Pittsburgh and Boston a number of shares in the new company equal to those they hold in the original company.—2. The Pittsburgh and Boston Company reserves all metal and minerals, together with the right to mine the same, which underlie any part of said grounds, at any point below the angle described by what is known as the slide, being about 24 or 25 deg. to the horizon, and immediately underlying the belt of greenstone indicated upon the longitudinal section of the workings of the Cliff Mine, as drawn by E. J. Hubert, mining engineer, in 1847. And also the right to sink, and of access thereto, such shafts, for purposes of ventilation or otherwise, as may by said company be deemed necessary.—3. The Pittsburgh and Boston Company reserve the right to remove from the said tract any saw logs, timber, or cord-wood which may have been cut previous to the present date. It also reserves the right of way for such roads across the territory to be conveyed as may, in the judgment of the directors, be necessary or most convenient for access to the lands of the company which are reserved. In March last Mr. C. G. Hussey was elected president: Messrs. J. M. Cooper, Harvey Childs, T. M. Howe, J. W. Clark, and E. Jennings, directors; and Mr. T. M. Howe, secretary and treasurer.

#### MINING IN JAMAICA.

WHEAL JAMAICA COPPER COMPANY.—Charing Cross, Nov. 26: Little or nothing done last week, in consequence of very heavy rains. The work reported to Nov. 16 is—Sunken in shaft 1 fm. 2 ft.; done on road, 42½ chains.

ELLERSLIE AND BARDOWIE.—John Holman, Salisbury Plain, Nov. 20: I have to report that the lode in Waller's end, driving from the 10, has improved since my last communication, having shown for the last 4 fms. two regular walls, with good ore throughout, and increasing in width and richness as we extend on its course. I may here mention that the lode (Arthur's) never had regular walls until this month. In the 5, driving above Waller's end, at the underlie shaft, I am glad to state that we have a lode of good saving ore, about 18 in. wide, and upon which I have driven about 3 fathoms to date, finding ore throughout. Driving south-east on the lode over the ladder winze, in Evans's, or the day level, we have had small branches of good ore, but nothing regular, nor do I expect it to be so shallow at the point, with the ground unsettled close to the flockan course. I have placed the Cornish miners to sink the perpendicular shaft to the next, or 10 fm., level, being anxious to get this work completed, as I expect the lode at that depth will be regular, and good on both sides the flockan course, which course, however, I do not expect will be found at that depth. I have suspended the driving of Parry's cross-cut until the air-shaft is through, as the men cannot work in the end for want of ventilation; this work will be completed in three weeks or a month, and I shall then be enabled to push on the cross-cut much faster than before. In consequence of the heavy rains, I am obliged to put on hands to repair the roads, which were much damaged; but to the working of the mine not the slightest accident has occurred.

RO GRANDE MINING COMPANY.—The weather throughout the eastern end of the island has been very severe, but we have no account of its having done our mines any injury; in fact, their conformation being porphyritic, we are not likely to sustain serious damage in that respect. Capt. Arthur reports that he is opening on Chesterfield the back of a large lode, which is composed of blue porphyry, intermixed with spots of yellow copper ore and green carbonate. This lode I am inclined to think must be a new discovery, at any rate it has not yet been reported on. Capt. Arthur also states that No. 5, Brookdale, is looking well, and yielding about the same quantity of ore mentioned in his former reports. He is laying on the ground upwards of 3 tons of good ore work to dress. Some more bags and another barrel of ore had arrived in Kingston from Portland. If such mines as these were in Cornwall they would not fail to attract capital to work them with vigour, which is all that is wanted here to deliver any quantity of ore.

HOPE SILVER-LEAD AND COPPER MINING COMPANY, capital 100,000 £, in 4000 shares, of 25c. each. The whole of the shares have been allotted, and the full amount paid up. This company has already received and sold 23 tons of lead ore, which produced 107, 18s. per ton, and have upwards of 100 tons shipped, or ready for shipment. They have also now in England about 10 tons of argenticiferous copper ore, some of which has been assayed to 35 2-3 per cent. of copper, and 216 ozs. of silver to the ton of ore. Some samples gave 110 ozs. of silver, and no doubt that a good average product of silver will continue to be yielded from this ore, though it is too much to expect in general so rich a yield from the first actual experiments proved. Sufficient has, however, been ascertained from actual results, both in Jamaica and in this country, to leave no doubt whatever of the immediate importance which attaches to Jamaica as a mining country.

PLATINUM.—The heaviest and the lightest substances with which we are acquainted possess the properties which chemists recognise as metallic. The light





rich stones of ore.—North Lode: In the sink and slope in bottom of adit west, lode 5 ft. wide, all saving work. No material alteration in any other part of the mine.

**WHEAL CHARLOTTE.**—B. Gundry, F. Hosking, Dec. 23: We have finished cutting ground, and are now fixing our plunger-lift in the 60, in the north shaft, which we shall complete before we cut the south lode in the 60, which we expect our cross-cut is very near to. The 50, west of engine-shaft, on the south lode, will produce  $1\frac{1}{2}$  tons per fm., worth 12s. The winze sinking under the 40, just before the 50 end, is down 5 fathoms, and will produce 2 tons per fm., worth 16s. The winze sinking 15 fms. further west is down 4 fms., and will produce  $1\frac{1}{2}$  ton, worth 12s. per fm.; the lode has been disordered in this winze, but is now becoming settled, and improving fast. The winze sinking 15 fms. west of Trevelyan's shaft, under the 40, is down 4 ft., and will produce 2 tons, worth 20s. per fm. The 40 end, west of Trevelyan's shaft, is producing 2 tons of good ore per fm., worth about 20s.; the backs of the 40, for 60 fms. long, are worth from 18s. to 20s. per fm. The tribute pitches are looking very well. We are pushing the 40 and 50 fm. levels with six men in each, and we hope the next sampling will be more than the last.

**WHEAL EDWARD.**—M. H. East, Dec. 18: North Lode: The men are making good progress with the skip-road, and expect to complete it to the S2 next week. In the 71 west we are driving by the side of the lode in moderate killas ground. The lode in the bottom of the S2 west is 4 ft. wide, composed of capel, spar, prian, mudiic, and copper ore, worth about 2 tons of ore per fm. The lode in the S2 west is disordered for the present, being divided by a horse of killas. South Lode: The ground in the sup-shaft, sinking under the 71, is easier for exploring, and looking favourable for mineral—sinking by the side of the lode. The lode in the 71 west is much the same as last reported. The lode in the 71 east is  $2\frac{1}{2}$  feet wide, and looking very much better; the end is producing good saving work at present, and looking promising for a good improvement. The lode in the 61 east is worth fully 2 tons of ore per fm. The cross-cut toward the north lode is being driven by four men, at 6d. per fm. The lode in Wilton's slope, in back of the 71 west, is worth 2 tons of ore per fm. The lode in Hampton's slope, in back of the 61 east, is worth 3 tons of ore per fm. The lode in Sandy's slope, in back of the 61 east, is worth 2 tons of ore per fm.—P.S. The whim-engine boiler is being repaired with all possible dispatch, and it is hoped that we shall be able to commence drawing again on Tuesday morning. I am glad to say we have not been obliged to suspend operations at either point, but there is now a large quantity of stuff accumulated underground in different parts of the mines.

—M. H. East, Dec. 21: South Lode: The lode in the 71 east is much improved, now worth full 12s. per fm., whilst the level above, the 61 east, is worth 14s. per fm., and both points promising further improvement. These levels being in whole ground to surface augur well for the future. No other change.—P.S. The boiler is repaired, and we commenced drawing stuff this morning.

**WHEAL EMMA.**—W. Goldsworthy, Dec. 23: The 58 east has slightly improved, but in consequence of breakage this week very little has been done in this end, the water having been in, but is now nearly in fork. The 46 east is still oily. There is no change in the 46 west. There is nothing new in the tribute department.

**WHEAL GREENVILLE.**—G. H. Odgers, Dec. 18: The lode in the 80, east of the shaft, is from 18 in. to 2 ft. wide, of quartz and iron; it is alive for ore, and there continues to flow a great deal of water from it. In the western end the lode is 15 in. wide, of quartz, &c., producing good stones of ore and mudiic. In the 66 east we have commenced a cross-cut north, and we have found a branch nearly 12 in. wide; this take to be the west part of the engine lode; its composition is quartz and flookan. There is no material alteration in No. 1 cross-cut since my last, but we are continually meeting with "rust heads," which are letting out water freely. In the western end, same level, the lode is about 18 in. wide, of quartz, which is compact and very regular. In costeanning this week we have discovered two branches: No. 1 is about 6 in. wide, underlying south, and about 6 or 8 feet south of this branch we have discovered another, but larger; altogether it is about 2 ft. wide, composed of quartz, prian, and a little gossan, with granite intermixed; this also underlies south, but in depth I calculate they will be found to be one and the same lode. If we may judge from the bearings of it, as laid open in the lode, it must be the new north lode of South Frances.

**WHEAL HARRIETT.**—S. Williams, Dec. 18: The caunter lode in the 100 east end is 2 ft. wide, producing some good work for tin. I consider this to be a very promising end, although it is not quite so productive at present as last week. The main lode in the 90 east end is 1 ft. wide, producing good work for tin, with stones of copper ore, worth about 10s. per fm. The main lode in the 74 east end has not been taken down for the week. The main lode in the slopes below the 74 east is producing about 3 tons of copper ore per fm. The main lode in the deep adit, east end, is improving, now worth near 1 ton per fm., and showing symptoms of a further improvement. The lode in the slope below the deep adit is producing 2 tons of copper ore per fm.

**WHEAL KITTY.**—(St. Agnes).—M. Edwards, T. M. Thomas, Dec. 18: The angle-bob is now placed in position in the 54, and the rest of the new pitwork is nearly complete, and will be put to work in about 12 hours more. The shaftmen will then cut a pit in the 90, and after finishing the same they will at once begin to sink below that level. The lode in the 90 west is 2 ft. wide, worth 9s. per fm.; in the same level east it is  $2\frac{1}{2}$  ft. wide, worth 10s. per fm. The winze in bottom of the 82 west is now down 3 fms.; the lode is 4 ft. wide, worth 18s. per fm.; good progress continues to be made in the cross-cut; in this level, which is now extended 12 fms. 3 ft. from the point of intersection; in the same level, driving east, the lode is 3 feet wide, worth 10s. per fm. The lode in the 72 east is 18 in. wide, east, worth 7s. per fm., and in the 54, east of Sunny Corner shaft, the lode is 18 in. wide, worth 6s. per fm.—Holgates Shaft: The lode in the 75, west of this shaft, is 3 ft. wide, worth 20s. per fm.; in the same level east it is also 3 feet wide, worth 10s. per fm. The lode in the 65, driving west, is 18 in. wide, worth 7s. per fm. In the 54 it is 2 ft. wide, worth 8s. per fm. All the other parts of the mine, as well as the slopes and pitches, continue to yield fair quantities of mineral.

**WHEAL LUDCOTT.**—Robt. Knapp, Dec. 23: Willcock's sumpmen having finished cutting the pia, caising and dividing the shaft, fixing penthouse, &c., are now engaged sinking for beams and cistern under the 50. The lode in the 50, north of Willcock's shaft, is 2 ft. wide, and will produce 7 cwt. of lead per fm.; in the same level south of the shaft, the lode is 1 foot wide, and will produce 4 cwt. of lead per fm. The slopes in the back of this level will produce on an average 7 cwt. of lead per fathom. The 30 north is driven to the boundary. The slopes in the back of this level will produce on an average 5 cwt. of lead per fm. The pitches throughout the mine are producing a fair quantity of lead.

**WHEAL MARY EMMA.**—Wm. Doble, Dec. 23: The lode in the engine-shaft is much as last reported on. The lode driving from on the adit cross-cut is improving as we drive into the hill towards the granite; this is No. 5 lode, as shown in the sketch you have; it appears to underlie south, so we shall have a junction of several lodes at no great depth—a very important point.

**WHEAL MAUDLIN.**—W. Tregay, Dec. 21: The 35 west is getting through the hard bar of ground, and the lode on the other side is composed of mudiic, peach, and capel, no gossan in the part we have now.—South Mine: The lode in the east end is composed principally of gossan, with some spar.

**WHEAL POLLARD.**—J. Nance, Dec. 23: The 35 cross-cut end continues very wet, but we have not yet made any further discovery. The sinking of the engine-shaft progresses much as usual.

**WHEAL TEHIDY.**—John Pope, Dec. 22: In the 60 cross-cut south there is nothing new. In the 50 east, on the caunter lode, the lode is 10 in. wide, producing good stones of ore. In the 50, east from the boundary, the lode is 18 in. wide, with good stones of ore—a very kindly lode. In the tribute department there is nothing new since my last.

**WHEAL TREBARVAH.**—Ben. Gundry, F. Hosking, Dec. 21: The men at flat-rod shaft are engaged cutting ground and making the necessary preparations to fix the 10 fm. lift in the 70. The 60 is communicated, which will now relieve our flat-rods of 10 fms. weight of water. In the 70, east of flat-rod shaft, the lode is 6 in. wide, producing good stones of ore; the 70, west of flat-rod shaft, is unproductive. In the 40, west of flat-rod shaft, the lode is 15 in. wide, composed of quartz, blende, mudiic, and copper ore, it has a very kindly appearance.—Old Mine: Richard's shaft is just commenced sinking below the 50, there is a good branch of ore in the shaft, 6 in. wide, which we consider will produce  $1\frac{1}{2}$  ton per fm. In the 30, east of this shaft, the lode is 10 in. wide, and will produce about  $1\frac{1}{2}$  ton per fm. of copper ore. There is no alteration to report on in any other part of the mine.

**WHEAL TRELAWNY.**—Wm. Bryant, Wm. Jenkin, T. Grenfell, Dec. 23: Smith's engine-shaft is sunk 8 ft. under the 70. We have cut into the capel of the lode in this level 4 feet, and bored in a large hole 3 feet (making altogether 7 ft. of capel), where we have reached the lode, out of which the water has washed some very good lead ore, and we have no doubt of a good lode. In the 142, north of the shaft, the lode is 2 ft. wide, worth 15s. per fm.; in the same level south it is small and unproductive; in the winze sinking under this level it is 3 ft. wide, worth 15s. per fm. In the 132, north of Chippingdale's, it is 2 ft. wide, worth 10s. per fm. In the 120, north of ditto, it is 2 ft. wide, worth 8s. per fm.—South Mine: Trelawny's shaftmen are still engaged in cutting pitch. In the 142, south of the shaft, the lode is 3 feet wide, worth 10s. per fm. In the 130 south it is 3 feet wide, worth 10s. per fm. In the 107 north it is 3 feet wide, worth 8s. per fathom. The slopes and pitches are producing much as usual. We sampled, on Saturday last, 80 tons (computed) of crop lead ore.

**WHEAL UNION.**—Thos. Givans, Dec. 22: There is no change in any part of the mine since my last report.

**WHEAL TREVETHAN.**—J. Trevethan, Dec. 22: We have no particular change of ground in the cross-cut in driving towards the lode. The men are frequently intersecting small branches of carbonate of lime, which shows an approach of the lode.

**WILLOW BANK.**—Wm. Pauli, Dec. 20: Very little work has been done since the last report, in consequence of our ponds being dry. In three days after the last report I am glad to say that we have got the mine in fork, and the ponds nearly full, so I hope we shall not be idle for want of water for some time. Saturday last being our pay and setting-day, the following bargains were set:—The 30 fm. level to drive east by six men, at 8s. 10s. per fathom. The cross-cut to drive south from the 30, 2 fms. east of shaft, by two men, at 7s. 10s. per fm. The shaftmen will go on as last reported.

**YARNER.**—J. Hampton, N. Faull, Dec. 24: The ground in the shaft consists of spar and clay-staite, thickly impregnated with spots of copper and mudiic. The lode in the 20 east is 2 feet big, composed of mudiic and occasional stones of ore; there was never more water coming from the end, which we expect will soon be more valuable. The 20 west is fast improving, and is now worth from  $1\frac{1}{2}$  to 2 tons per fm. The slopes in the 20 cross-cut is very good both for speed and copper; to-day we have cut another branch of copper and mudiic, which is letting out a stream of water. We have commenced sinking a winze in the bottom of the 10, which is producing 3 tons of copper ore per fm.

**WHITTINGTON COLLIERY COMPANY.**—A company has been formed for the purchase of this well-known mineral property near Chesterfield. It comprises a surface extent of about 150 acres, and nearly 900 acres of coal, as it extends under adjoining land. A contract has been entered into for its purchase, with machinery and plant, for £8,000, the computed value of which is £6,745. There are five beds of seam, which it is estimated will produce 3,000,000 tons of good workable coal, adaptable to houses, manufacturing, coke, or gas purposes. The Dunston mine has already been won, and is working at the easy depth of 45 yards, averaging about 5000 tons to the acre. There are also three rich beds of ironstone of approved quality, and brick earth and fire-clay have also been obtained. The colliery plant is in perfect order, of an extensive character, and capable of raising above 200 tons of coal daily. By a short branch the Midland Railway is brought to the pit's mouth, whence the coals are delivered (screened) into the railway wagons; and as the Chesterfield Canal is immediately contiguous, every facility for transit is afforded. Great advantage is possessed by the colliery being in actual proximity to the canal, which is rapidly extending, and contracts exist for the whole present value of the colliery. The capital (£6,000,000) is raised to complete the purchase of the property, and thoroughly to develop the whole mineral wealth of the estate. The proprietor has agreed to allow 20,000/- of the purchase money to remain on mortgage, to be repaid by annual instalments, commencing at the expiration of the second year. By this arrangement the necessity to call up more than 3/- per share, and not more than 7/- eventually during the first 10 months is obviated, while a sufficient working capital is at the time provided. It appears that the freehold land was some time since valued at

13,000/-, but as of late there has been a demand for building purposes it is estimated that by its sale a much larger sum would be realized. The computation of the directors is, that after 8 per cent. has been allowed for replacement of capital and interest, there will be left more than 10 per cent. for further division, until after the second year, when more than double this rate will be realized. Messrs. Jeffcock, Walker, Hazlehurst, and others, have made valuations of the property, which, with the calculations of an experienced mining surveyor, can be seen at the company's offices, 27a, Bucklersbury.

#### LEGITIMATE MINING AS AN INVESTMENT.

BY JOHN ROBERT PIKE.

In last week's Journal we promised to enumerate on this occasion the principal discoveries which have been recently made. The bulk of the particulars has already appeared at different times in these columns, but we conceive that their collation into a group may be of some public advantage.

**EAST BASSET.**—This mine forms part of the Basset group, and promises to be distinguished for the richness and quantity of its ores. Until within the last three weeks the 60 fm. level was the lowest point at which the principal lode was cut, and it was left more than 10 per cent. for further division, until after the second year, when more than double this rate will be realized. Messrs. Jeffcock, Walker, Hazlehurst, and others, have made valuations of the property, which, with the calculations of an experienced mining surveyor, can be seen at the company's offices, 27a, Bucklersbury.

**WHEAL EDWARD.**—M. H. East, Dec. 18: North Lode: The men are making good

progress with the skip-road, and expect to complete it to the S2 next week. In the 71 west we are driving by the side of the lode in moderate killas ground. The lode in the bottom of the S2 west is 4 ft. wide, composed of capel, spar, prian, mudiic, and copper ore, worth about 2 tons of ore per fm. The lode in the S2 west is disordered for the present, being divided by a horse of killas. South Lode: The ground in the sup-shaft, sinking under the 71, is easier for exploring, and looking favourable for mineral—sinking by the side of the lode. The lode in the 71 west is much the same as last reported. The lode in the 71 east is  $2\frac{1}{2}$  feet wide, and looking very much better; the end is producing good saving work at present, and looking promising for a good improvement.

The lode in the 61 east is worth fully 2 tons of ore per fm. The cross-cut toward the north lode is being driven by four men, at 6d. per fm. The lode in Wilton's slope, in back of the 71 west, is worth 2 tons of ore per fm. The lode in Hampton's slope, in back of the 61 east, is worth 3 tons of ore per fm. The lode in Sandy's slope, in back of the 61 east, is worth 2 tons of ore per fm.—P.S. The whim-engine boiler is being repaired with all possible dispatch, and it is hoped that we shall be able to commence drawing again on Tuesday morning. I am glad to say we have not been obliged to suspend operations at either point, but there is now a large quantity of stuff accumulated underground in different parts of the mines.

—M. H. East, Dec. 21: South Lode: The lode in the 71 east is much improved, now worth full 12s. per fm., whilst the level above, the 61 east, is worth 14s. per fm., and both points promising further improvement. These levels being in whole ground to surface augur well for the future. No other change.—P.S. The boiler is repaired, and we commenced drawing stuff this morning.

**WHEAL EMMA.**—W. Goldsworthy, Dec. 23: The 58 east has slightly improved, but in consequence of breakage this week very little has been done in this end, the water having been in, but is now nearly in fork. The 46 east is still oily. There is no change in the 46 west. There is nothing new in the tribute department.

**WHEAL GREENVILLE.**—G. H. Odgers, Dec. 18: The lode in the 80, east of the shaft, is from 18 in. to 2 ft. wide, of quartz and iron; it is alive for ore, and there continues to flow a great deal of water from it. In the western end the lode is 15 in. wide, of quartz, &c., producing good stones of ore and mudiic. In the 66 east we have commenced a cross-cut north, and we have found a branch nearly 12 in. wide; this take to be the west part of the engine lode; its composition is quartz and flookan. There is no material alteration in No. 1 cross-cut since my last, but we are continually meeting with "rust heads," which are letting out water freely. In the western end, same level, the lode is about 18 in. wide, of quartz, which is compact and very regular. In costeanning this week we have discovered two branches: No. 1 is about 6 in. wide, underlying south, and about 6 or 8 feet south of this branch we have discovered another, but larger; altogether it is about 2 ft. wide, composed of quartz, prian, and a little gossan, with granite intermixed; this also underlies south, but in depth I calculate they will be found to be one and the same lode. If we may judge from the bearings of it, as laid open in the lode, it must be the new north lode of South Frances.

**WHEAL HARRIETT.**—S. Williams, Dec. 18: The caunter lode in the 100 east end is 2 ft. wide, producing some good work for tin. I consider this to be a very promising end, although it is not quite so productive at present as last week. The main lode in the 90 east end is 1 ft. wide, producing good work for tin, with stones of copper ore, worth about 10s. per fm. The main lode in the 74 east end has not been taken down for the week. The main lode in the slopes below the 74 east is producing about 3 tons of copper ore per fm. The main lode in the deep adit, east end, is improving, now worth near 1 ton per fm. The main lode in the slope below the deep adit is producing 2 tons of copper ore per fm.

**WHEAL KITTY.**—(St. Agnes).—M. Edwards, T. M. Thomas, Dec. 18: The angle-bob is now placed in position in the 54, and the rest of the new pitwork is nearly complete, and will be put to work in about 12 hours more. The shaftmen will then cut a pit in the 90, and after finishing the same they will at once begin to sink below that level. The lode in the 90 west is 2 ft. wide, worth 9s. per fm.; in the same level east it is  $2\frac{1}{2}$  ft. wide, worth 10s. per fm. The winze in bottom of the 82 west is now down 3 fms.; the lode is 4 ft. wide, worth 18s. per fm.; good progress continues to be made in the cross-cut; in this level, which is now extended 12 fms. 3 ft. from the point of intersection; in the same level, driving east, the lode is 3 feet wide, worth 10s. per fm. The lode in the 72 east is 18 in. wide, east, worth 7s. per fm., and in the 54, east of Sunny Corner shaft, the lode is 18 in. wide, worth 6s. per fm.—Holgates Shaft: The lode in the 75, west of this shaft, is 3 ft. wide, worth 20s. per fm.; in the same level east it is also 3 feet wide, worth 10s. per fm. The lode in the 65, driving west, is 18 in. wide, worth 7s. per fm. In the 54 it is 2 ft. wide, worth 8s. per fm. All the other parts of the mine, as well as the slopes and pitches, continue to yield fair quantities of mineral.

**WHEAL LUDCOTT.**—Robt. Knapp, Dec. 23: Willcock's sumpmen having finished cutting the pia, caising and dividing the shaft, fixing penthouse, &c., are now engaged sinking for beams and cistern under the 50. The lode in the 50, north of Willcock's shaft, is 2 ft. wide, and will produce 7 cwt. of lead per fm.; in the same level south of the shaft, the lode is 1 foot wide, and will produce 4 cwt. of lead per fm. The lode in the 40, south of the shaft, is 1 foot wide, and will produce 4 cwt. of lead per fm. The slopes in the back of this level will produce on an average 7 cwt. of lead per fathom. The 30 north is driven to the boundary. The slopes in the back of this level will produce on an average 5 cwt. of lead per fm. The pitches throughout the mine are producing a fair quantity of lead.

**WHEAL MARY EMMA.**—Wm. Doble, Dec. 23: The lode in the engine-shaft is much as last reported on. The lode driving from on the adit cross-cut is improving as we drive into the hill towards the granite; this is No. 5 lode, as shown in the sketch you have; it appears to underlie south, so we shall have a junction of several lodes at no great depth—a very important point.

**WHEAL MAUDLIN.**—W. Tregay, Dec. 21: The 35 west is getting through the hard bar of ground, and the lode on the other side is composed of mudiic, peach, and capel, no gossan in the part we have now.—South Mine: The lode in the east end is composed principally of gossan, with some spar.

**WHEAL POLLARD.**—J. Nance, Dec. 23: The 35 cross-cut end continues very wet, but we have not yet made any further discovery. The sinking of the engine-shaft progresses much as usual.

**WHEAL TEHIDY.**—John Pope, Dec. 22: In the 60 cross-cut south there is nothing new. In the 50 east, on the caunter lode, the lode is 10 in. wide,

same time last year. The contract with the Belgian Government for 372 tons of refined has been taken at about 45s. per cwt. In last week's impression, page 830, the stock on hand should have been 2430 tons, against 6560 tons at the same time last year, instead of the quantity stated.

The approach of the Christmas holidays generally brings with it a diminution of business, but we cannot as yet observe much change in the MINING MARKET. Great activity has prevailed during the week, and the demand for several mines is exceedingly great. In fact, the rise in metals, and the improved position in which most mines stand, are daily bringing capitalists into the market; and, compared with business doing on the Stock Exchange in other classes of securities, the Mining Market is enjoying a species of monopoly in business. Grambler and St. Aubyn shares have been in demand, and advanced to 142s. 147s.; the ore sampled, and to which we referred last week, will realise upwards of 26000L instead of 20000L, as we then estimated it, wishing rather to be under than over the mark. Condurrow shares have also been in good request, and have risen to 60, 70. Carn Brea, 67s. to 72s., buyers, and no sellers. Wheal Mary Ann, 44 to 45, ex div. East Basset continued till Thursday at 160 to 16s., when late in the day a great demand sprung up, and shares leave off at 170, 175; the ore sampled (120 tons) is calculated to produce 19000L; 61 tons from the new discovery in the 80 yard a produce of 19 per cent., and 59 tons a produce of 13½ per cent.; sanguine as we ever were in regard to this mine, the extraordinary richness of the discovery has far surpassed even our expectations, and we were almost alone in upholding it as a speculation. Providence Mines, 61 to 63, and looking remarkably well in the new discovery. Trevoole, 15 to 16, and the mine greatly improved. Rosewarne and Herland, 9 to 10, and in demand, with few sellers. Wheal Crebor shares have been quiet during the week at ½ to 1. Redmoor rather more enquired for at 4s. to 5s.; the mine has sampled this week 31 tons of lead ore, 17 tons of it being of first quality. Wheal Trelawny shares have been done at 29 to 30; the caps of the lode have been cut through in the bottom level, and next week the value of the lode may be known. Wheal Charlotte, 18 to 20; Wheal Addams, 14 to 16; Lady Bertha, 14 to 16; East Russell, 7s. to 7s.; the mine is looking well, and the sampling next week to be 70 tons of good copper ore. Marke Valley, 24 to 24; Herodsfoot, 7 to 7s.; Great Hews, 10s. to 11s.; East Rosewarne, ½ to 1; Wheal Grenville, 28s. to 30s. Wheal Margaret, 62s. to 65, and in demand, with few sellers. North Dolcoath, 5s. to 6s.; Kelly Bray, 2s. to 2s.; West Caradon advanced to 137s. 140; Tamar Consols, 1 to 1½; Tin croft, 32s. to 32s.; Bryntail, 10s. to 11. South Basset, 6s. to 7s., and in considerable demand, in expectation of cutting the lode. United Mines have been in demand, and advanced to 122s. 127s. West Seton, 290 to 295, ex div.; West Basset, 21 to 22; North Basset, 8 to 8s.; Great South Folgus, 12 to 13; Wheal Edward, 2s. to 2s.; Wheal Kitty (St. Agnes), 3s. to 4s.; Nanteos and Penrhian, 1½ to 1½; South Caradon Wheal Hooper, ½ to 1½; Camborne Vean, ½ to 1½; Great Alfred, 3 to 3½; North Roskear, 21 to 22; Craddock Moor, 29 to 31. North Robert, after receding to 24, 25, advanced to 24, and a large business done. Wheal Harriet, 14s. to 16s.; Par Consols, 13 to 16; Wheal Hender, 1s. to 1½, and in demand; Rosewarne, 20 to 25. Wheal Basset, 210 to 220; a large sampling has been made here, and the mine looking well. South Frances, 230 to 235; Vale of Towy, 12s. to 13s.; Tolcarne, 15s. to 16s.; Alfred Consols, 7s. to 8s., and rather enquired for; Gonamena shares are flatter, at 7s. to 8s.; Ludcott, 43s. to 45s.; Wheal Wrey, 2s. to 2s.; at the meeting, a call of 2s. 6d. per share was made.

The Board of Trade Returns for November were issued yesterday. The exports of articles identified with mining, the produce and manufacture of the United Kingdom, were:—

	1852.	1853.	1854.
Metal—Pig-iron	£119,802	£108,919	£59,537
Bar-iron	454,733	388,892	395,436
Wire-iron	23,591	27,048	26,971
Cast-iron	79,216	60,129	49,095
Wrought-iron	329,410	321,454	245,494
Steel, unwrought	70,936	39,199	45,712
Copper, unwrought	59,246	82,896	81,582
Copper sheet and nails	159,720	108,538	141,305
Lead	40,899	26,613	36,559
Tin, unwrought	17,555	17,318	10,941
Tin-plates	136,260	53,592	100,874
Coals and culm	196,587	255,514	191,333
Hardware and cutlery	371,584	315,092	291,531
Steam machinery	101,516	44,694	45,044
Other machinery	172,249	250,262	150,463
Salt	36,305	17,322	17,252

From this it will be seen that iron does not occupy so good a position as last year, and unwrought tin likewise shows a decline; unwrought copper remains about stationary; steel, copper sheets and nails, and lead, show a fair increase, and the exports of tin-plates have nearly doubled.

In the COAL MARKET, during the past week very little has been doing, in consequence of the small number of arrivals. On Monday as there were no house coals at market, the prices obtained for the other qualities were 15s. 6d. to 16s. 9d. for manufacturers', and 14s. for Hartley's: there were only 12 ships at market, the whole of which were sold. On Wednesday there was a small arrival of best and second qualities; and there being only 24 ships at market they were immediately bought up. Yesterday the closing prices were—Best, 18s. 6d. to 19s. 3d.; seconds, 17s. 3d. to 18s. 9d.; manufacturers', 15s. 6d. to 16s. 3d.; Hartley's, 14s. 9d.; and steam qualities, 21s.

**EXPORTS OF COAL IN NOVEMBER.**—From Messrs. Laird and Co.'s Statistics of the Coal Trade, it appears that the total exports last month were 367,408 tons, showing a decrease, compared with the corresponding month of last year, of 115,573 tons. The total exports from Jan. to Nov. inclusive were 5,696,786 tons, being a decrease, compared with the same period of 1857, of 168,120 tons. During November the northern ports exported 175,746 tons—decrease, 72,149; Yorkshire ports, 20,286 tons—decrease, 5,226; Liverpool, 26,437 tons—decrease, 24,886; Severn ports, 113,725 tons—increase, 3462; Scotch ports, 31,214 tons—decrease, 16,783 tons.

At Truro Ticketing, on Thursday, 4431 tons of ore were sold, realising 24,999. 12s. 0d. The particulars of the sale were—Average standard, 139. 12s.; average produce, 6; average price, 5s. 13s.; quantity of fine copper, 266 tons 7 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Nov. 25	3285	£135 10	6½	£6 0 6	£93 0
Dec. 2	3703	134 14	6½	6 3 0	92 3
" 23	4109	136 9	6½	6 2 6	94 3
" 23	4431	139 12	6	5 13 0	93 17

Compared with last week's sale, the advance has been in the standard 17. 9s., and in the price per ton of ore about 2s. Compared with the corresponding sale of last month, the advance has been in the standard 27. 8s., and in the price per ton of ore 3s.

At Swansea Ticketing, on Tuesday, 919 tons of ore were sold, realising 24,780. 17s. 6d.—The particulars of the sale were—Average standard, 104. 3s. 6d.; average produce, 28; average price per ton, 26s. 19s. 6d. The particulars of the sales during the past month have been:—

Date.	Tons.	Standard.	Produce.	Price.	Ore copper.
Nov. 23	1877	£112 7 0	11 7-16	£10 11 0	292 15 0
Dec. 21	919	104 3 6	28	26 19 6	96 6 0

There had been no sale since November 23; compared with that sale the standard and price per ton of ore show a trifling advance. On Tuesday, of the 919 tons sold 199 were British, which gave an average produce of 11 3-16, and realised 107. 13s. per ton, the average standard being 115. 8s. 6d. The 720 tons of foreign ores gave an average produce of 32 11-16, and realised 317. 9s. 6d. per ton, the average standard being 103. 2s. 6d. The high produce of the foreign ores is explained thus:—The Cobre Company sold eleven parcels, the lowest produce being 33, and the highest 34½; Wheal Maria three parcels, lowest 36½, highest 41½; English and Canadian Mining Company, three small parcels (total 5 tons), lowest 21½, highest 52½; and there were 28 tons of Australian regulus, produce 57½, included in the sale.—On Tuesday next 1302 tons will be sold, the ores being from Cobre, Berehaven, Wheal Maria, Springbok, and Holyford.

Foxdale (Isle of Man) declared a dividend of 12s. per share on Tuesday.

At Wheal Grylls meeting, on Dec. 14, the accounts showed—Balance last audit, 140s.; ores sold (less lord's dues, 1-18th, 531. 12s. 3d.), 911. 9s. 11d.; St. Aubyn and Grylls—whim-drawing, 37. 12s. 1d. = 10551. 1s. —Mine cost, from May to Oct., 399. 4s.; merchants' bills, 587. 11s. 1d.; leaving credit balance, 4381. 14s. 2d.; advance on tribute, 280L; leaving credit balance, 4381. 14s. 2d. There was a profit on the two months' working of 600L 1s. 7d. The estimate of assets over liabilities was 681L 12s. 1d. Captain T. G. Glynville reported that in the 132 cross-cut, north of the flat-rod shaft, the south lode had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At North Wheal Basset meeting, on Wednesday (the Rev. C. Clinton in the chair), the accounts showed—Advance on tribute, 360L; copper ore sold, September, 1424. 14s. 11d.; October, 1806L. 12s. 6d. = 3591L 7s. 5d.; Balance last audit, 162. 9s. 5d.; mine cost, merchants' bills, &c., Sept., 1255L 19s. 7d.; Oct., 1454L. 14s. 2d.; advance on tribute, 280L; leaving credit balance, 4381. 14s. 2d. There was a profit on the two months' working of 600L 1s. 7d. The estimate of assets over liabilities was 681L 12s. 1d. Captain T. G. Glynville reported that in the 132 cross-cut, north of the flat-rod shaft, the south lode had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At St. Austell Consols general meeting, on Tuesday (Mr. S. Barker in the chair), the accounts showed—Balance from last account, 863L. 5s. 6d.; calls received, 140s. 13s. 7d.; received for black tin, 3812L. 0s. 5d.; received for copper ore and carriage, 59. 6s. 4d.; received for uranium, 21L. 14s.; received for arsenic, 29. 9s. 9d. = 6168L. 4s. 2d.—Mine costs, merchants' bills, and lords' dues, 5867L. 12s. 10d.; iron, 267L. 19s. 7d.—Mine costs, merchants' bills, and lords' dues, 5867L. 12s. 10d.; iron, 267L. 19s. 7d.—The estimated assets for three months amounted to 3139L. 12s. 10d.; a call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At West Alfred Consols meeting, on Dec. 18 (Mr. G. A. Ashton in the chair), the accounts showed—Balance last audit, 232L. 12s. 6d.; Tin sold, 31L. 7s. 4d.; call, 376L. 15s.; merchants' bills, 331L. 6s. 5d.; sundries, 59L. 8s. 5d. = 2010L. 10s. 2d.—Call, 840L. 10s. 8d.; copper ore sold (less lord's dues, 25L. 7s. 6d.), 583L. 12s. 4d.; iron, 267L. 19s. 7d.—Leaving debit balance, 569L. 7s. 4d. A call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At the Wheal Sidney meeting, on Wednesday (Mr. E. S. Codd in the chair), the accounts showed—Balance last audit, 232L. 12s. 6d.; Tin sold, 31L. 7s. 4d.; call, 376L. 15s.; merchants' bills, 331L. 6s. 5d.; sundries, 59L. 8s. 5d. = 2010L. 10s. 2d.—Call, 840L. 10s. 8d.; copper ore sold (less lord's dues, 25L. 7s. 6d.), 583L. 12s. 4d.; iron, 267L. 19s. 7d.—Leaving debit balance, 569L. 7s. 4d. A call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At the Wheal Wrey Consols meeting, on Wednesday (Mr. E. S. Codd in the chair), the accounts showed—Balance last audit, 232L. 12s. 6d.; Tin sold, 31L. 7s. 4d.; call, 376L. 15s.; merchants' bills, 331L. 6s. 5d.; sundries, 59L. 8s. 5d. = 2010L. 10s. 2d.—Call, 840L. 10s. 8d.; copper ore sold (less lord's dues, 25L. 7s. 6d.), 583L. 12s. 4d.; iron, 267L. 19s. 7d.—Leaving debit balance, 569L. 7s. 4d. A call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At the Wheal Wrey Consols meeting, on Wednesday (Mr. E. S. Codd in the chair), the accounts showed—Balance last audit, 232L. 12s. 6d.; Tin sold, 31L. 7s. 4d.; call, 376L. 15s.; merchants' bills, 331L. 6s. 5d.; sundries, 59L. 8s. 5d. = 2010L. 10s. 2d.—Call, 840L. 10s. 8d.; copper ore sold (less lord's dues, 25L. 7s. 6d.), 583L. 12s. 4d.; iron, 267L. 19s. 7d.—Leaving debit balance, 569L. 7s. 4d. A call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At the Wheal Wrey Consols meeting, on Wednesday (Mr. E. S. Codd in the chair), the accounts showed—Balance last audit, 232L. 12s. 6d.; Tin sold, 31L. 7s. 4d.; call, 376L. 15s.; merchants' bills, 331L. 6s. 5d.; sundries, 59L. 8s. 5d. = 2010L. 10s. 2d.—Call, 840L. 10s. 8d.; copper ore sold (less lord's dues, 25L. 7s. 6d.), 583L. 12s. 4d.; iron, 267L. 19s. 7d.—Leaving debit balance, 569L. 7s. 4d. A call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

At the Wheal Wrey Consols meeting, on Wednesday (Mr. E. S. Codd in the chair), the accounts showed—Balance last audit, 232L. 12s. 6d.; Tin sold, 31L. 7s. 4d.; call, 376L. 15s.; merchants' bills, 331L. 6s. 5d.; sundries, 59L. 8s. 5d. = 2010L. 10s. 2d.—Call, 840L. 10s. 8d.; copper ore sold (less lord's dues, 25L. 7s. 6d.), 583L. 12s. 4d.; iron, 267L. 19s. 7d.—Leaving debit balance, 569L. 7s. 4d. A call of 10s. 11d. per share was made, and the committee of management were re-elected. Capt. S. Lean and B. Stevens reported that the prospects, on the whole, were considerably improved. The south wall had been intersected, which was 3 ft. wide, composed of spar, intermixed with copper ore, and as the lode at this point was dividing the granite and killas, it was thought they would again have a deposit of ore.

</

THE PROGRESS OF MINING IN 1857,  
BEING THE FOURTEENTH ANNUAL REVIEW.

BY J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

The FOURTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in a SUPPLEMENTAL SHEET to the MINING JOURNAL of Jan. 2, 1858.

A FEW COPIES of the REVIEW of 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects upwards of 200 Mines. Also a FEW COPIES of the REVIEW of 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d. or £1 per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to Investors and Speculators. A Record of Daily Transaction in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON, F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill. N.B. Looking at the causes for the present depression in mining shares, Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines to pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 30th Sept., 1858, with Particulars of the principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Three Years, &c., and a SPECIAL REPORT ON TOLVADDE MINE, by Capt. CHARLES THOMAS, IS NOW READY.

Price One Shilling, at 117, Bishopsgate-street, Within, London.

Reliable information and advice will at any time be given on application.

Also, COPIES of "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S. Pp. 356, boards, price 6s. 6d., by post 4s. See advertisement in another column.

CORNISH COPPER MINING ENTERPRISE, 1850 TO 1st MAY, 1858, INCLUSIVE.

By R. TREDDINICK, Mining Engineer and Share Dealer, 4, Austinfriars, London. 1000 copies only published, price bound 5s, per copy. Early application, to guard against disappointment, is earnestly requested.—Communications to be addressed to the Editor of the *Mining Journal*, 26, Fleet-street, London.

New ready,  
IS MINING FOR METALLIC ORES A LEGITIMATE AND PROFITABLE CHANNEL FOR INVESTMENT? OR IS IT NOT?

By JOHN ROBERT PIKE.

May be had gratis on application, either personally or by letter, at his offices, 3, Finsbury-court, Old Broad-street, London, E.C.

Now ready,  
THE JOINT-STOCK ACTS OF 1857, 1857, 1858, and the BANKING ACTS of 1857, 1858, with Notes, Forms, References, Full Information, all the Legal Decisions, and Copious Index.

By THOMAS HUGH MARKHAM, Esq., M.A., Barrister at Law of the Inner Temple.

London: Andrew Robertson, 39, Chancery-lane.

In grained roan book cover, gilt edges, price 6s.

ADCOCK'S ENGINEERS' POCKET BOOK for 1859, for the Use of Engineers, Architects, Surveyors, Directors, Contractors, Mechanics, and Clerks of Works, containing, together with a Ruled Diary and the usual information of an Annual Vade Mecum, highly valuable Tables and Formulas, Elementary Treatises on Practical and Scientific Subjects, specially adapted to casual reference, and Original and Valuable Papers on Various subjects, Barrat Clay Ballast, Artesian Wells, Electro-telegraphy, &c., with Illustrations on Copper.

London: Simpkin, Marshall, and Co. Sold by G. and R. W. Hebert, 88, Cheapside; and by all booksellers.

Now published, price 10s. 6d., crown 8vo, A HANDBOOK OF RAILWAY LAW: Containing the Public General Railway Acts, from 1833 to 1858 inclusive, and Statutes connected therewith; with an Introduction, containing Statistical and Financial Information, &c.; Notes, Forms, and a copious Analytical Index.

By ARTHUR MOORE, Esq., Secretary of the Dublin and Wicklow and Kingstown Railways; author of *Compendium of Irish Poor Law*, &c.

W. H. Smith and Son, 186, Strand, London, and Sackville-street, Dublin; Bradshaw and Blacklock, Manchester.

### Notices to Correspondents.

\* Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

MANUFACTURE OF IRON AND STEEL.—In your notice of the samples of ore-bloom metal, which I forwarded to the *Mining Journal* last week, you have termed them "Ore-Bloom Steel." This is an error, as they are not steel, but are soft homogeneous iron. Since "One Interested" has discovered that my processes have been anticipated by others, and are, therefore, either valueless or, at all events, superfluous, why has he proposed to constitute me one of the "Steely Triumvirate?"—ROBERT MUSHER: Colerford, Dec. 23.

MANUFACTURE OF STEEL.—In consequence of your notice in last week's Journal, I have tested the ore bloom steel made by Mr. Musher's process, and find its quality to be excellent. If it be made from ordinary British coke pig-iron, I am convinced that it must come into general use. Being aware that there is always much difficulty in introducing new inventions in England, I would suggest that the French market be tried, and believe that if offered in Paris at the price Mr. Musher advertises it here, with the simple addition of freight and duty, it would be a highly remunerative speculation.—PARISIAN: City, Dec. 21.

SOUTH EUROPE MINING COMPANY.—In the report of the company's meeting, which appeared in last week's Journal, in answer to a question, Mr. Thorngrove appears to multiply the apparent tangible hypothesis which has been promulgated in certain quarters that the mines of this company are, *de facto*, extinct volcanoes—that is to say, if your reporter has rightly rendered his answer. It were presumption on my part to doubt the scientific acquirements of that gentleman, but it really seems there is more geological datum that these mines are really extinct volcanoes than that they are not. Perhaps, Sir, among your numerous scientific readers this notice may elicit some important information in connection with the district wherein these mines are located.—F. A.: Dec. 22.

COLLECTION OF FOSSILS.—Perhaps you may deem the following of sufficient interest to entitle it to a place in your Journal:—A friend, just returned from Belgium, informed me that the rare fossil and mineral collections of the distinguished André Dumont, late Geological Professor and Rector of the University of Liege, is to be disposed of. It consists, I am assured, of no less than 21,700 specimens, many of them of great beauty; all revised and classified by Dumont himself. The opportunity is an unusual one, and well worthy the attention of such of the scientific institutions of our large cities as may be desirous either of forming new collections or of enriching already existing ones.—GEOLOGIST: Paris, Dec. 17.

BEEF ROOT PAPER.—A paragraph from your Journal, relating to this article, was published in nearly all the London and provincial papers, a circumstance which I consider proved that the invention was of great value; and certainly a cheap paper, possessing all the good qualities of the glycerine paper, would meet a ready sale. Yet carefully as I have watched for the announcement of the invention having proved successful upon practical trial, I find no further mention of it. Can you, or, if he is not, what is the cause of his delay in bringing his invention before the public? Money is plentiful now, and if that be the sole requisite for ensuring his success, he would find plenty of capitalists both able and willing to assist him by subscribing a definite sum, provided they were secured against further liability. From what I understand, the difference of repeat would be equal to repealing the paper duty, and so much is said about this repeat, all must admit that the introduction of beef root paper would be one step in the way of—PROGRESS: Manchester, Dec. 29.

WHEAL ZION.—By reference to last week's Journal, I perceive that a special meeting is to be called for Tuesday, in order to determine on the sale of the mine, machin-ry, &c. I had hoped that when the Glebe land was purchased a turn in our fortunes would have taken place. We were told by the agent that there was every prospect of improvement. The mine, I see, is no longer in the Share List. I trust the sale of the property will realise sufficient to discharge the liabilities, and that there will be no necessity for further call. It must be acknowledged that several of the shareholders in this mine have exercised great patience, and followed the management in all its peregrinations from Bath through the various offices. A run of ill luck appears, however, to have followed us, although we have been several times near the attainment of fortune. In November, 1857, the improvement that then took place nearly all interested imagined would be lasting. There was a rise in the shares at that time. We were deceived in prognostications, and now may fairly anticipate that with the close of the present year Wheal Zion will exist but in name.—R. H.

MINE INSPECTION.—As far as regards the public, it appears in many cases there is no great faith to be placed in reports, however well-qualified the parties may be who make them. The San Fernando de Cuba was inspected by Prof. Ansted. No one will venture to doubt either his honesty or capability, and yet we see how unfortunately this has turned out. He has practice, sound judgment, and has given to the world several able works treating of his profession. In this instance we have an educated gentleman of great proficiency being deceived. On the other hand, we often see persons who have not the slightest qualifications for the task they undertake obtaining the ear of the public, push projects which by a lucky hit occasionally answer, and bring repute to the self-dubbed in poster. In my opinion, though practical authorities are the greatest guide, every one should, to a certain extent, consult their own common sense as to any undertaking they may embark in, and ascertain whether there are any probabilities of success. A recent trial in the Court of Queen's Bench informed us how an Inspector of nuisances and a druggist could be transmogrified into a civil engineer, mine Inspector, and land surveyor. But this, it must be remembered, was under particular circumstances, and associated with a man who it was believed at one period turned all he touched to gold, although the revelations of the Bankruptcy Court have since told us all belonged to other people. The great damage done to mining appears to me to be this—that when all legitimate business fails there are many people who turn their attention to mining as a dernier resort; and if they either have to visit Basinghall-street or Portugal-street, it looks well in their schedule to attribute their losses to mining adventures. It is fresh in the memory of all the failure of the house engaged in the China Trade for 300,000*l*. Before the Commissioner it was stated this was owing to mining speculation. When, on reference to the schedule, it was proved that only the comparatively insignificant sum of 230*l*, had been invested in mining shares, many of these being at the time available assets. Owing to this, and several other extraneous circumstances, much undeserved reproach has been thrown upon our mineral enterprise. It would be as well that the public should know who are the real Simon Purées, or who are the counterfeits. Mining were left alone to miners and those connected with it, and no interlopers allowed to interfere, or if when they did so were unmasked, as a profession it would take a much higher rank, and obtain that reputation which its importance deserves.—Mons.

PATENT PROCESSES.—Next March it will be two years since Mr. Robert Oxland, of Plymouth, stated he would forward to the *Mining Journal* a description of his patent process for the purpose of extracting wolfram from tin. In a recent Journal I perceive he again reiterates his promise. I trust that he will not this time be so long in fulfilling.—STUDENT: Jersey-street.

LEVANT MINERAL COMPANY.—I perceive in your last Journal that this company is omitted from the Share List. Although not much I believe has lately been done in shares, as there are comparatively few holders, yet the company are still raising emery at Naxos. It is to be regretted that the directors have not further developed the vast resources, which, according to their first prospectus, they stated they were about to do. They may be probably over cautious; but if so, this an error on the safe side, and at their next meeting they will, I have no doubt, be able to render a faithful and satisfactory account of their stewardship.—DEMETER: Jersey-street.

B. E. (Birmingham).—The only copper mine of importance in Sweden is that of Fabian, which it is stated is the oldest in Europe: there are traditions of its existing over 1000 years. Swedish iron is principally manufactured from magnetic ore. All the iron is bound to go through the Jarn Veerka Contor. In order to protect the smaller mines it must be sold at a certain price, which is fixed by that establishment. The steel principally used for manufacturing fine cutlery is obtained from Dannemora. At Gellivara and Swayze-vaara there are likewise iron-works, but as they lay near the Gulf of Bothnia, and in inclement latitudes, they are but partially worked. Attempts have been made to prosecute silver, lead, and copper lodes in the province of Dalecarlia, but owing to want of capital these have not been taken up. Two are, however, working, that of Sahlia for silver-lead, and the Dalecarlia. This last was opened a few years since by an English company, of which the late Mr. John Daniell was the sole proprietor. It was, however, abandoned by them, but is in full operation by a Swedish association, who are returning profits.

TWYNAHILL.—I perceive by a notice in the Journal of last week that this mine has sampled 104 tons of good quality copper ore. In my previous communications I have stated to you the good repute which the mine has always had in the vicinity. We may now hope that it will be prosecuted with energy. Had this been done last year at the time it was taken up the parties who then intended to work it, would have been in a better position. It is now again fairly at work; let us hope that it will continue to be so, and of advantage to both the employers and employed.—D. J.

GOLD REDUCTION.—I cannot conceive, unless it be to fritter away the remaining capital, what is the utility of waiting for further advice from California, or what that has to do with Mr. Squire's process. The directors are perfectly aware that they cannot expect any more favourable results from Mr. Attwood. In fact, in the month of July that Mr. Squire first offered his process to the directors, Col. Kennedy bore testimony to its practicability, having seen it tested at Walworth; so did Mr. J. H. Clement. The only person who appeared to doubt its efficacy was Mr. John Arthur Phillips. We were then told nothing could be done until Oct. 6. Two months have now elapsed since that period, and nothing definite has as yet been settled. It does appear to me that in all gold mining companies the preceding genius of the management, both at home and abroad, has been prostration. Surely there must be a termination to these vexatious delays. It appears that hitherto, as far as the shareholders know, there are no liabilities. Let them at the next meeting see that something definite is arrived at. The Anglo-Californian Gold Mining Company, after they had expended all the capital, incurred liabilities to the amount of 16,000*l*. The shareholders are now called upon to pay 5s. per share in order to discharge these, although when the scrip was issued it was stated that the 16*l*. was paid up, and no further liability to be incurred. Verbum ast.—PRESBYTER: Bromley.

THE GOLD QUESTION.—"An Old Smelter" alludes to the probability of the revival of the gold question. If such is to be the case, which Heaven forefend, at least let us have some practice, and not a repetition of the theoretical wanderings which not long since emanated from the delusions of the several alchemists, who were as chimerical as their predecessors. These, however, had had their merit in pursuit of a shadow. They elucidated some great chemical facts, which were useful to science. The present have never yet made any observation worth preserving.—GRUMBLER.

WHEAL GURKES.—The point mooted in this company as to whether after a mine is in the Statuary's Court the secretary is empowered to make calls is one of great importance to the mining community at large, and the sooner it is decided by some competent judicial authority the better. I am aware in this instance that both the conflicting parties state they are acting under legal advice. Doctors differ, and lawyers disagree, and, therefore, bystanders have only to look to the decision of the judge. Mr. Berry at one period was the solicitor of Mr. Jeffree; I perceive now that he is acting for the shareholders. If the secretary has advanced money for the legitimate purpose of the mine he ought to be reimbursed. I do not, however, think that he should be the arbitrator in his own case. If he conceive, however, that he has right on his side, the question must be tried at once; one suit would determine who was in the wrong. The terrors of the law would not be held over the heads of the shareholders, and by this simple means we should arrive at a true definition of the powers of the Statuary Court. Whatever that might be, it would be haled with satisfaction by all parties, especially as it would involve a final settlement of this tangled skein.—H. S.: Threadneedle-street.

WHEAL EMMA CROSS-COURSE.—I have frequently seen my name mixed up with a certain controversy respecting a cross-course on the Wheal Emma sett; now, as I write my reports from actual observation, I think any one who refers to that on the Emma Mine (published in the Journal at the time it was made), will find that I stated a cross-course did exist, and I described what I saw. A party at the time made some severe remarks on the report, and attempted to insinuate that I had not been in the mine at all, or, if there, the survey must have been a very superficial one, as the number of wheels on the mine were stated incorrectly. To this I replied, that if the party did not know how to read I knew how to write correctly. But to this late question, whether a cross-course existed or not, I never thought it worth while to trouble you; this I know, when I was there a cross-course did exist, and I saw it. I am glad to find that your explanation justifies my views of the matter stated at the time, as well as my proclamation of the productiveness of Wheal Emma in the deeper levels.—GEORGE HENWOOD: Dec. 21.

LADY BERTHA.—This mine has again had various inspections by several agents—Capt. Gifford, of Creher; Capt. Richard Bunt, of Devon Great Consols; Capt. W. Mitchell, of London; and many others. The agent's time must be nearly occupied by attending to so many inspections. The difference in the reports of the various agents being so great has attracted much attention. I know Capt. Cleme, of Devon Great Consols, to be a man of strict honour and integrity, and would not lend his name to an untrustworthy report, but still there may be an error of judgment. As a shareholder I should, therefore, suggest, for the sake of Capt. Cleme, and giving Capt. Jas. Metherell fair play, that a disinterested man be called in, and his report be sent to the Journal.—

EAST WHEAL RUSSELL.—This matter, so far as we are concerned, terminated in our last Journal. To do justice to the numerous communications we have received would require a supplement devoted to the purpose; but, as we consider that no good end could be served, we have resolved on omitting all reference to the matters in question, pro or con.

LADY BERTHA.—I think if "A Miner" (Carmarthen) would only take up your valuable JOURNAL every week he would have no occasion to ask what length we carry Carter's wine. He can refer to the columns of British Mine, dated Nov. 6.—J. METHERELL.

\* With the MINING JOURNAL of Dec. 4 we gave a SUPPLEMENTAL SHEET, which contains—Dr. Hyde Clarke's paper "On Copper Smelting" read at the Society of Arts; Notes on Metals and Mining—No. IV.; Cornish Mine Photographs—"Redruth Market Day;" Cornish Mining Maxims; Forest of Dean—No. II.; Mineral Legislation in France; Waterford and Kilkenny Railway; The Iron Trade in Sussex; London to America in 110 Days—Iron Shipbuilding on the Tyne; Railways in Spain, &c.

Now preparing,

### THE PROGRESS OF MINING IN 1858.

BY J. Y. WATSON, ESQ., F.G.S.

BEING THE FIFTEENTH ANNUAL REVIEW.

And will be published in a SUPPLEMENTAL SHEET to the MINING JOURNAL of Jan. 1, 1859.

It being the object to make the Annual Review as perfect as possible, agents and purasers will oblige by forwarding, either to Mr. WATSON, St. Michael's-alley, Cornhill, or to the Journal office, a brief account of their mines, with any other particulars they may possess, to be embodied. We court information, and shall gladly avail of all that is communicated.

## THE MINING JOURNAL

### Railway and Commercial Gazette.

LONDON, DECEMBER 25, 1858.

An obstinate adhesion to any principle the fallacy of which is daily proved would be, according to the rules of common sense, an evidence of perverseness and folly calculated to attain upon just and tenable grounds the character of ordinary individuals. What, then, shall be said of extraordinary people, who vaunt them of the highest order of intelligence, and yet would assert their possession of the attribute by circumscribing its action, narrowing judgment to fatuity, and rendering perspicuity blindness? This anomaly, however, does exist, and might possibly be bearable—a mere matter of commiseration—so long as the persons creating it were the only sufferers; but when their sin of wilfulness is visited upon a community, and the commerce of a country flags and fails under the baneful influence, it is high time to assail the evil, and arrest its progress.

The ironmasters of France have, unfortunately for the trade of that country, rendered themselves obnoxious to everything which should be done against the supporters of an evil system, and the promoters of a selfish and short-sighted policy. Acting in concert, they had sufficient weight with the Government to prevent the renewal of the October decrees, which admitted Belgian and English iron almost duty-free, under the stipulation that it should be re-exported in the manufactured state. Their plea, however, although thus successful, is now proved a fallacy, and looks, it must be allowed, very like a deliberate and wilful fabrication. The allegation upon which they mainly depended,—that the protective provision of the decree was evaded, and a large amount of the foreign manufactured iron absorbed into the home trade—is, *prima facie*, as ungrounded an assertion as ever emanated from a commercial body. Nor is it extenuated by the fact

that a political character was infused into their argument against all interference with the monopoly they have so long misused, to the extent that it alone enables them to employ a large body of people, who, if out of work, would become turbulent, and dangerously antagonistic to authority; and this they lost no opportunity of impressing on the Imperial Government. It failed not in effect; for such a representation was, it may well be conceived, the true secret of their recent successful opposition to that principle of free trade to which the Emperor is known to lean. This local tranquillity is, they aver, too necessary to the maintenance of the powers that be, to be risked even for the general commercial prosperity of the country, and they would thus uphold "prohibition" as the palladium of the empire; but as is so frequently the case where unscrupulous and interested persons plead their own cause, they have proved too much, and the Customs' returns cannot fail to show the Protectionists in power, if any there really be, how egregiously they have been practised on and deceived. With the mere political bearings of the question we have nothing to do. It is with a great national industry, injured and oppressed, we sympathise; because we would see the mining interest, taken in its widest sense, untrammelled and untrammelled, believing it to be in every country a great element of peace and prosperity, and an impetus to science the most practical and useful. Let us now see what prohibition has effected for our neighbours. The importation of pig-iron last month amounted to 9293 tons against 10,292 in Nov., and 11,179 in the corresponding month, of 1856. The returns show 1684 tons were exported during the last month against 4416 in the corresponding month of last year, and against 6276 in that of the preceding year. Copper imports fell during the year from 1472 to 1210 tons; lead from 2285 to 1195 tons; and zinc from 2782 to 1262 tons.

These statistics prove a general decline of the metal trade, and probably constitute a pretty fair indicator of the general effect of restrictive laws on the entire commerce of France. One thing they prove, taking the gradual decrease of the iron imports into consideration, that the allegation as to the non-re-exportation of the manufactured British and Belgian iron admitted under the October decree is false in every particular. The decline in iron and the other mineral imports, can only be attributed to the general decadence of the trade and commerce of the country under this protective policy. That the sympathies of the industrial classes in France are not with protection there can be little doubt, and that the labouring population ally themselves cordially to those who, upon liberal grounds

and the Inspectors, doubtless, believe that by thus striking terror into the hearts of these poor men they are best promoting the object sought to be accomplished by their appointment. It may serve to divert the attention of the public from the real cause of the accident, but among those ostensibly to be benefitted by such an example it creates only disgust and indignation. In cases where accidents occur after inspection, in which advice has been contumaciously rejected, and, after due remonstrance, the provisions of the Act have been utterly disregarded, by all means have recourse to the penalties of the Act to enforce obedience, and to maintain the supremacy of the law. Such conduct would be in true accordance with the spirit and intention of the Act, and would meet with the approval of the public, as well as the respectful submission of the miners themselves. What we want is more inspection, not penalties; more instruction as to what is wrong, not the punishment of it; and, in short, the prevention of accidents. Until we have more frequent inspection the Act cannot be said to have been fairly tried, and it will be useless to attempt amending it, except as we have suggested, unless it be fairly and vigorously carried into execution. How long we shall have to wait until all the coal mines in Great Britain participate in the benefits conferred by this Act it is difficult even to guess, for if the dignified inactivity of our gentlemanly officials is to continue in fashion, another eight years may elapse before we see any diminution of the thousand lives now annually sacrificed in our coal mines. We hope for better things; we trust that the Inspectors may be roused into greater activity; and, above all, we hope that Parliament will make a searching enquiry into the working of the Act, and provide efficient remedies for its administrative defects.

The able and useful statistics collated annually by Mr. ROBERT HUNT, and published under the auspices of the Geological Survey of Great Britain, and the Museum of Practical Geology, demonstrate the importance of the mineral industry of the United Kingdom. Previous to the publication of these memoirs an approximation was all that could be arrived at. The information then obtained was charily given, and from it no definite results could be arrived at. For a considerable period, although the greatest mineral-producing country of the world, we possessed no records of our progress, and while the increase of every other species of industry was noted, that of minerals and metals was entirely neglected, and it was a matter of surprise to all foreigners that Government took no cognizance of one of the most important sinews of wealth to the British empire.

Our tin mines are of great antiquity. Lead, it is known, was smelted here in the time of the Romans, and several pugs of that metal of the time of the earlier emperors may be seen in the British Museum. Within the last few years the humble Museum located in an obscure corner in Craig's-court has found a fitting and more suitable location in Jermyn-street, and the pupils of that establishment who have passed their examination are already doing good service in various quarters of the globe. It is but comparatively recent that Government Inspectors have been appointed to supervise coal mines. These have shown their utility, although it is to be regretted that they are not more numerous, as it must be self-evident that in each district there are a greater number of collieries to superintend than is possible for one Inspector to accomplish, however talented he may be.

The Government School of Mines has proved of great utility, and probably would be better attended were it not for the expense entailed upon the country students by a residence in the metropolis. This, however, cannot be avoided, as such an establishment must be central, in order to obtain the most talented men available as teachers. We may express a hope that at no distant period those who have received their education there will be enabled to diffuse the knowledge so acquired in less famed localities. The district school established at Bristol is now of some importance; and north of the Tweed our neighbours are now bestirring themselves to erect a similar academy in the West of Scotland. These are favourable indications of the desire of the miners to become better educated. These schools are, however, mainly for colliers, and consequently principally treat of the subjects concerned with coal mines.

An attempt was made to establish a district school in Cornwall for metallic miners, and this we know, unfortunately, during the present year has failed from want of support from those for whose benefit it was principally intended. We are not about here to analyse the causes which led to this deplorable result. We can only regret it, and trust that the day is not far distant when the advantages to be derived from such an establishment will be more fully appreciated in the Duchy of Cornwall.

It has been stated—we know not with what truth—that many of the failures which have arisen in foreign mines, where Cornishmen have been employed, is attributable to their obstinate prejudice in working there without reference to locality or other circumstances, they merely imagining that the same system as pursued in Cornwall should be followed out in other places. It is well known that lodes in their characteristics greatly differ in various districts, and it is, therefore, a great advantage to the metallic miner that he should know how, and under what circumstances, these changes occur. He ought, at the same time, to have such a knowledge of ores as to enable him to distinguish the several minerals which may be comprised in them. Their separation ought to be considered as well as their utilisation. A knowledge of surveying and dialling should not be neglected; these are some of the principal points. We have merely alluded to them here in order to show the desirability of our Cornish miners acquiring such information.

There appears now to be every inclination on the part of all connected with collieries to forward the cause of education; and we trust that those interested in metallic mining, despite the failures that have occurred, and the opposition that has been encountered, will not relax in their endeavours, but strenuously try to re-establish some educational establishment for metallic miners in a locality where its utility may be available to all who are interested. It is not for us to point out how this desideratum is to be arrived at; this must be left to circumstances, and will greatly depend upon the support to be obtained from the miners and those who are concerned in the prosecution of mines. The present year is now nearly expired, and no one can foresee what the ensuing may bring forth. During the past period the cause of education, with but the exception referred to, has progressed; and we can only express a hope that it will not retrograde, but advance steadily, so that our metallic miners will no longer have the reproach of being less willing to acquire knowledge than their compeers.

Among the few continental States that offer a secure and profitable investment for mining capital, Piedmont deserves to take high rank, not only from the nature and character of the Government, but also on account of the diversified and extraordinary mineral wealth its soil contains. In the Alpine glens, and amid the range of hills, Nature has accumulated in abundance nearly all the metals—at least, all that are most prized for manufacturing purposes; and within the same district, not exceeding many acres in extent, may be found iron, copper, zinc, and silver-lead. To the Romans, Piedmont was the chief source of supply of metals, but, notwithstanding their workings, they may be said to have done little more than remove the surface deposits, leaving intact the richest and most important veins and lodes.

The Vallee de l'Arc is perhaps the richest of all. It abounds with iron ore of that quality which is the most highly esteemed—spatose ore. The steel manufacturers in the French department of the Isere, are compelled to employ it, and so necessary is it to them, that although they are the staunchest of Protectionists, they have induced the French Government to make an exceptional reduction in the import duties upon the steely pig-iron produce in the valley of the Arc. The analysis, by BERTHIER, shows the ore to contain for 100 parts—Protodioite of iron, 50; manganese, 8; magnesia, 0.7; lime, 1.7; carbonic acid, 38; gangue, 1. The quantity of ore in this district has been estimated by the eminent French mining engineer, M. PERUDET, at 2,570,000 tons.

After the iron ore, the most important mineral deposit is that of copper. It is found in the form of pyrites, associated with the iron ore, in masses of from 10 to 15 metres long, 5 to 10 metres wide, and 1½ metres thick. Consequently, although found in the iron workings, the copper pyrites are not intermixed with the iron ore, and there is no necessity for the tedious operation of sorting. The pyrites contain 22 per cent. of copper; and in one portion of the district the copper ore is found alone, of an average richness of 35 per cent.

The lead ore, or galena, which has been analysed by M. BONNEVILLE, assayer to the Bank of France, gave 35 per cent. of lead, and 30 grammes of silver to the 100 kilogrammes.

The calamine has never been worked at, although its abundance and richness have been fully recognised.

An important element of success in working the mines of the valley of the Arc is the presence of excellent anthracite, close to the mines, which M.

ELIE DE BEAUMONT designated *Terrain Anthracifère des Alpes*. There is also an abundant and cheap supply of charcoal and water-power, valued at 450 horse-power, while the Victor Emmanuel Railway passes over the mines. This property belongs to M. le Comte de CHATEAUNEUF, who holds it by a direct grant from the Crown through the family of the Prince de CARIGNAN before they ascended the throne; and who, we are glad to learn is making arrangements for working the mine with the aid of English capital and English engineers. The present imperfectly-worked mines and furnaces return, we are informed, a net income of 8000£, which will secure upwards of 10 per cent. upon the amount of capital to be raised, while out of this amount a considerable portion will remain available to increase the efficiency of the means of exploration, from which it is calculated will result an interest of not less than 20 per cent.

The scheme is presented under the most favourable auspices. A certain income of 10 per cent., which admits of being doubled, and is most favourably regarded by the Sardinian Government as an important means of developing the resources of that portion of the country. The most influential Members of the Sardinian Parliament are among the directors, including the General Count SONNAZ, late Governor of Turin, and M. COLLOMB, Governor of the Bank of Savoy, at Chambery.

Our Australian colonies are repeating their demands for the employment of British capital in their respective sources of production. Victoria has recently explained its requirements in this respect for the construction of railways to open up the traffic of the colony, and asks for about 8,000,000£ sterling, looking chiefly to this country for a response to her demand, and now South Australia expresses the necessity of having extraneous money support even for ordinary commercial enterprise, but especially to develop the extraordinary mineral riches within her territory, and which are shown to be greater than were originally supposed by the arrival of almost every mail from Adelaide. On this interesting, and, indeed, very important subject, the local press<sup>well</sup> at much length, and we cannot better explain the wishes of the colonists than by transcribing some remarks on this head from the *Adelaide Register*. That journal, in its number of Oct. 11, the latest date to hand, says:—

The great source of wealth to which we have so frequently called attention is now beginning to be more fully developed. The mines of the colony only await the employment of capital and labour to increase our exports in the article of copper tentfold, and to furnish an ample market within our own province for the produce of the agriculturist and the flockowner. It is necessary, however, that we should be aided by English capital to work our mines; and we call once more the attention of our friends in England, and of capitalists generally, to the importance of this colony as a field for mining enterprise. It is proved by every test short of actually bringing the ore to the surface, that the northern portions of the colony are rich to repetition in ores of copper. Mineral leases may be obtained from the Government on extremely favourable terms. Enterprising individuals are already reaping rich harvests under this arrangement, and the facts of the case require only to be known to induce many others to adventure in this field of labour. What is wanted is the formation of a few working companies, to lay bare the treasures of the earth and to diffuse them and their results throughout the community. It is difficult to conceive a finer opening than exists in this department of industry for remunerative returns to judicious investments. We should lament to see anything like a mining mania here, but it is a pity to allow sources of wealth uncalculated to remain closed almost at our doors. One of the most serious drawbacks in the way of our rapid progress in this respect is the want of sufficient capital for the most ordinary occupations. This is partly the result of the extension of our business without a corresponding increase in our stocks of the circulating medium. With money at an average value of 15 per cent. per annum, it is evident that an enterprise must be extremely profitable to tempt the capitalist to embark in it, or to warrant men of smaller means to involve themselves in debt in the pursuit of wealth. A very large number of operations of an industrial kind, which might be carried on profitably if money were obtainable at easier rates, are thus wholly checked. The capital of the banks in the colony is completely inadequate to the legitimate demands of trade.

#### THE GOLD QUESTION—IRELAND.

The question of whether gold, either in streams or in the quartz matrices, does really exist in paying quantities seems now likely to be fairly put to the test; at all events, the grant for certain rights in Ireland has been obtained from the Government, and the sum which it, as well as the Duchy offices, requires by way of assurance of the *bona fides* of the promoters has been paid. The dues are extremely liberal; we have heard the amount, as well as the sum laid down as a guarantee, but we think it would be out of our province to publish them.

It is known the Irish gold mines when worked last, sixty years since, were productive of considerable quantities of the precious metal in the metallic state. Many large personal ornaments have from time to time been found constructed from gold, evidently by a primitive race. These would seem to corroborate the idea, or rather tradition, that gold was in ancient times obtained in large amounts: since that period as much improvement has been made in gold mining as probably in any branch of the mining profession. An "Old Californian," who visited the spot, soon found the much-prized metal, and a little further exploration decided on the measures to which we allude. The fact is beginning to render landlords more alive to the value of their mineral property in the sister isle than they were wont. We trust the apathy hitherto displayed by these gentry will be reversed, and their doubts dispelled.

In a recent Journal we inserted an urgent appeal in favour of the Irish mining properties, and stated our conviction that it only required the energy and example of a few individuals of known business habits and standing in society to set the matter afloat in its true bearings, and thus to ensure success. We rejoice to be enabled to announce that a company, with a maximum capital of 50,000£, has been formed without difficulty. The promoters purpose expending a certain sum themselves in developing the mines ere they throw the shares open to the public, and call up the whole of the capital. The sum named by the engineers as requisite for these works has been readily furnished. As it will take many years to wholly explore these extensive mines, they only propose to call up the gross capital as may be required. This mode of procedure is certainly a very wise one, bespeaking, as it does, a degree of caution, calculation, and self-confidence; it would be well for many mining companies to adopt.

One of the crying evils against mining, and certainly one of the most legitimate of its grievances, is that projects are launched into the market without due consideration, and worked, or attempted to be worked, with inadequate capital: both are equally culpable.

If anything is to be gathered from surface appearances, or from the products of the mine as far as already operated on, or from the proximity to mines of world-wide celebrity, no doubt can exist of their productiveness and remunerative state long ere the time for calling up anything like the capital shall have arrived. We understand the whole of the proprietors are Irish gentlemen. We truly wish them God speed in their undertaking, and hope it may prove but the earnest of a great work that may, and probably will, conduce to the welfare of that now most certainly rapidly-improving section of the British empire.

Since the above was written, we learn, from good authority, another Irish mining company is on the *tapis*. The samples of ore we have seen are of the finest quality, and several tons have been procured at an insignificant depth, beneath a vast and splendid gossan. We shall continue to watch the progress of these undertakings with great interest, as we feel and know they will be productive of real and permanent good, not only to Ireland itself, but to the nation at large.

MANUFACTURE OF OIL.—A novel mode of applying the heated products of the combustion of fuel directly to the body intended to be decomposed, whereby the heat of the burning fuel commences chemical changes, resulting in the production of oil, while the heat disengaged in the changes is added to that arising from the fuel, has been patented by Mr. Hiram Hyde, of Truro, Nova Scotia. By his process the undue elevation of temperature at the moment of decomposition is prevented, layer after layer of the body being subjected to heat in succession at the lowest possible temperature, instead of the whole mass under treatment being simultaneously heated to the point of decomposition. In carrying out the distillatory process, a brick cylinder is employed to receive the charge to be operated on; and at the bottom of this cylinder a grate, or pierced plate, is provided. Below the grate is a cavity, which is connected by a channel to a well, or cistern, intended to receive the tar as the charge is decomposed. The tar cistern is closed by an air-tight cover, and it is provided with a dip-tube through which the tar may be pumped out, while an inverted siphon prevents the filling of the tar cistern above its extremity. A draft-pipe passing out of the tar cistern leads to a worm condenser, which has a dip-pipe with a diaphragm to separate the fluid from the gaseous products. Projecting into the draft-pipe is a jet-pipe and valve for the admission of high-pressure steam, which is used to create a down-draft through the grate into the tar cistern, thence along the draft-pipe, and through the condenser to the atmosphere. Supposing cannel coal is the substance to be decomposed, the brick cylinder is filled with moderately-sized fragments to near the top, and on the coal dry coke is evenly spread,

and over this again is laid ignited coke. The steam-jet being now set in action, and a down draft produced, the operation of forming oil will quickly commence. This oil, in vapour, with other bodies, will descend through the grate into the cavity below, and passing thence will be mostly condensed in the tar cistern. Any light oily, or watery vapours, with gases, will pass through the draft-pipe and enter the cooled condenser, whence the condensable products will be discharged at one point, and the gases, washed by jets of cold water, will escape at another.

NORTHAMPTONSHIRE IRON.—The development of the ore of this county progresses slowly, but with unerring steps. There is no question but the time is near at hand when the demand for Northamptonshire ironstone will be very large and general. We understand it is probable that a third furnace will be erected at Heyford early next year, and other iron ore works and furnaces are about to be proceeded with. An excellent and very rich deposit of stone is about to be brought into the market at Cookhoe, a village near Northampton. A siding is being made with the London and North-Western Railway, and sometime next month ore will be sent away from this place. The Gayton Stone Works are brisk, we learn, and large quantities of ore are daily being sent away from these works. The pigs made at Heyford are largely in demand, and almost any quantity could readily be disposed of.

NEW TIPPING APPARATUS.—An improved contrivance for preventing the great depreciation in the value of coal which usually arises from breakage in loading and unloading, has recently been introduced by Messrs. A. and J. Rigg, of Chester. It is too well known that under ordinary circumstances the breakage is immense, and when it is considered that small coal fetches but about one-fourth the price of the lumps, the importance of the invention will be readily understood. The advantages possessed by the machine are obtained by the use of a rotating scoop, combined with a very peculiarly constructed break arrangement, the whole being mounted upon turned axles and strong standards with brass bushes. The truck, as raised from the pit, is placed upon the table of the apparatus, and there firmly held, and by the simple release of a catch the whole apparatus, with the coals upon it, begins to move, and owing to the great friction upon the break wheel by the exertion of a very slight force on the part of the attendant, the machine may be made to rotate at any desired speed. The sides of the scoop prevent the coals falling over, and the rotation continuing, the inclination of the front plate increases until it is such that the coals do not fall, but slide forward, and are thus delivered upon the main screen or guide, and laid, not thrown, direct upon the railway or other conveyance. When the restoration of the machine to receive another load is required, the man at the break, by closing his hand upon its handle, withdraws a holding-down catch, and without any manual labour whatever the apparatus restores itself ready for another load. The whole contrivance being simple, quick in its action, strong and durable, it would seem fully entitled to general adoption.

#### THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL. FROM OUR CORRESPONDENT IN WEST CORNWALL.]

DEC. 23.—The Christmas season is a festive, not a business time, and therefore we shall probably find for the next week or two that mining share business will be comparatively neglected. But the new year will open with excellent prospects for mining;—the price of metals on the advance; trade reviving at home, and also in some of the foreign markets; several of the dividend and progressive mines looking better; and money in such abundance in the market as to justify the expectation that a considerable amount of it will be applied to mining investments.

The paper by Mr. Hyde Clarke, "On Copper Smelting," read at the Society of Arts (published in the *Mining Journal*, Dec. 4), has again drawn the attention of mining people to copper smelting; and the question is asked—What should prevent the mines from smelting their own ores? Coals can now be conveyed from Wales to Cornwall at a very low freight; there is much less expense in that conveyance than there was formerly. The profit on copper smelting, according to Mr. Low, is enormous; 40£, he says, upon every ton of fine copper, after paying all charges. It has always been believed in Cornwall that the profits are very large; but it was not supposed that they were so high as 40£, upon every ton of fine copper. The price of best selected is now 110£ per ton; if the profit be 40£, upon every ton sold, it is no matter for surprise that enormous wealth is accumulated by copper smelting. With regard, however, to the mines smelting their own ores, it has always been said that a sufficient combination would never take place among mine adventurers to effect that purpose. And probably such would be found the case in practice. So large a body of mine shareholders are constantly buying and selling, whenever they can get a chance of making profit, that it would be useless to expect such persons to join in a compact and settled partnership for the smelting of ores. But what should prevent the larger dividend mines joining together (they having, generally speaking, a more settled list of shareholders) for smelting their own ores, and the ores of contiguous mines, if such a scheme should be thought profitable? It can scarcely be supposed that sufficient capital would be difficult to obtain.

The capital for the projected Falmouth Docks is set down at 300,000£; about 30,000£ has been subscribed at Falmouth, and as to the remainder, it is said there is a certainty of its being forthcoming. If 300,000£ can be raised for the Falmouth Docks, could not 150,000£ be raised for a Cornwall smelting company? Still, considerable difficulties exist in the way of such a project. The copper trade is a difficult one to manage, and a company composed of a few capitalists would be likely to have an advantage over a larger smelting association. That copper smelting, however, as well as tin, could be profitably conducted in Cornwall, hardly admits of a doubt. A fact was mentioned in the *Journal* of last week which bears upon this point. The Elbe Copper Works, near Hamburg, are successfully carried on. The coals to supply them come from Newcastle and Sunderland, and the copper ores for smelting come from South America, paying high freights. If, against such disadvantages, these works are profitable, what should hinder similar works being profitable in Cornwall, close to the present time. The result, however, is that the miner gets a good price for his ore; and if there were what is sometimes called an independent miners' smelting company in the field, the miner would hardly get a better price for his ores than he does now.

The further advance this week in the price of copper has the effect of giving increased firmness to the shares of copper mines; and tin mines generally are also likely to advance in value, from the upward tendency of the metal market. Wheal Basset is looking rather better at one or two points. At East Basset, the lode in the 80 is worth from 80£ to 90£ per ton. The winze and stopes in the 60 give an excellent prospect of there being a long extent of ore ground in the 80. The United Mines are looking well, and will continue to produce large samplings; the sale next week will be a large one, consisting of 775 tons of ore. The Hot lode, both in this and Wheal Clifford, continues to be exceedingly productive, though difficult and expensive to work. South Frances shares are from 230£ to 235£. North Frances has a prospect of doing better in the 70. At Penstruthal, a call of 16s. per share has been made; the prospects are encouraging, and it is to be hoped the adventurers will be rewarded for their perseverance, as they have been, after a large outlay, in East Basset. At Bodmin Well, although the accounts are still against the adventurers, there is every prospect, from the appearance of the lode in the shaft, that a good mine will be found at greater depth. The present levels are evidently too shallow to discover any very considerable body of ore. At Botallack meeting a dividend of 2d. 19s. per share was declared, and upwards of 2000£ carried to next account. In the St. Agnes district, Wheal Ellen has a good lode in the 40 east and west. Wheal Budnick (dead) is looking well, and shares have lately considerably advanced. North Tresekerby is intended to be worked with vigour, and the prospects appear to be good. North Downs was formerly a rich mine, having sold about 130,000£ worth of copper ore, and the mine, it is reported, is about to be resumed. There are also other new mines named, which a period of mining activity will probably bring into notice next year.

At Redruth, last week, Mr. Richard Pearce, of the Mining School, delivered a lecture, with chemical experiments; and it is intended to form a chemical class in conjunction with the Redruth Mutual Improvement Society.

which it is hoped will prove of benefit to the members and others in that mining locality. If chemical classes could be formed in each of the mining districts they would, no doubt, be very useful.

#### THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

DEC. 23.—The Iron Trade presents a decidedly improved aspect. The American advices continue to be more favourable, and, generally, there is a better demand, and indications of a return to a state of steady activity. Pig-iron is very firm. Contracts for delivery in the early part of next quarter have, in some cases, been entered into at a slight advance, and there is a general impression that before these contracts expire an increased demand for manufactured iron will enable the makers of pig-iron to secure a further advance.

The Coal Trade is rather more active. The active spirits in the late strike are endeavouring to promote a Union amongst the colliers here, and to affiliate with the miners in the North of England. They take care to report their meetings; but as no statement has yet appeared as to the number that have joined, it is probable that the adhesions are not numerous.

In the Hardware Trades no particular change to notice, except a slight falling off in the orders, as the result of Christmas approaching. The advance in copper on Saturday was expected, and afforded no, or very slight, indication of the state of trade, as the peculiar constitution of the smelting body permits of the action of the laws of supply and demand being so greatly interfered with. The inconvenience of constant changes in the prices of copper and tin to manufacturers and merchants is great.

A very sad accident, of a kind of too common occurrence in South Staffordshire, occurred last week at Tipton. A sinker was working in a shaft, and called out "Go on!" as a signal to the engineer; this was repeated by the banksman, and the engineer proceeded to raise the chain. "Go on" is the ordinary signal when only material is being sent up; "Coming up" being called when persons are about to ascend. The engineer, G. Edwards, supposing that only dirt was coming up, having to "fire" himself, went to look at the grate as the engine was winding. The man himself, however, came up; the banksman on seeing the token on the chain called to the engineer to stop, but the latter could not do so in time. The poor fellow, seeing his danger, called to the banksman to push the runner over the pit's mouth, but this was placed on the side of the shaft near the engine, so that had he done so the bowk would probably have fallen upon him. The deceased gradually got outside the bowk, clinging to it; and just as it reached the pulley, sprang off on the edge of the shaft, but, either from rebounding or overbalancing, fell into the pit and was killed. The jury returned a verdict of "Manslaughter" against Edwards, the engineer, and expressed their disapprobation at the engineer being so placed that in such a case it was most perilous to do that on which the safety of the man ascending depended—to cover the pit's mouth. No doubt the carelessness of the deceased in not indicating that he was coming up was in a great degree the cause of the accident.

The glass-makers at Stourbridge still continue on strike, and the dispute with their masters appears to be rather imbibited than otherwise.

At Birmingham, on Thursday, a meeting of manufacturers and merchants was held to memorise the Government to repeal the paper duties. It was stated that paper to the amount of 30,000,000 is annually consumed in Birmingham. The special grievance complained of in relation to the trade of that town was that French and German makers of paper buttons, paying no duty, competed with the Birmingham makers, who were saddled with the duty, in addition to which the price of paper was enhanced by the interference which Excise regulations caused in its manufacture. A resolution in favour of preparing and forwarding a memorial to the Government was unanimously agreed to.

#### REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

DEC. 23.—The advent of Christmas has turned the attention of everybody to the festivities of the season, and the heart must really be sad indeed that could not be merry at this period of the year. The trade, which appears to be improving steadily, will, as the lawyers say, remain in *status quo* until after the holidays, and the present aspect of things points to excursions, friendly visits, huge plum-puddings, and festive gatherings of all descriptions for the approaching Christmas. It is a mistake to suppose that the miner is indifferent about the celebration of Christmas, or that he is unprovided with roast beef and plum-pudding, and many other of the good things of this world. We fear, however, that the recent strikes will seriously affect the domestic comforts of the miners in South Yorkshire, and several other districts, but we hope the present will prove a lesson not easily to be forgotten. We are glad to observe that a subscription has been made in Leeds to provide a fund to enable the colliers' wives to have tea party, and to enjoy the festivities of the season, as well as to celebrate the termination of the strike.

The Coal Trade is exceedingly good, and prices are very well maintained. All the collieries are very fully employed, and orders are abundantly plentiful. It is expected that the Duke of Newcastle's new colliery at Worksop will be down in the spring of next year upwards of 560 yards, to the top hard coal of Derbyshire or Barnsley bed. The collieries of the Midland Counties will, it is supposed, yield about a quarter of a million tons of coals more this year than last. Up to the present time we have much pleasure in recording that no fatal explosions of fire-damp have occurred, and we sincerely hope that this may be the case for years to come. It can only be accomplished by vigilance on the part of managers, and care and attention on the part of the workmen. We have no means at present of ascertaining the number of deaths in coal mines in the Midland Counties, but, judging from the reported cases, they are considerably less than in 1857. From many sources we hear favourable accounts of the operation of the Coal Mines Inspection Act; and no doubt its very salutary clauses, and the energy and care of proprietors and managers, have done much to reduce the loss of life. The collieries of the Midland Counties are becoming less dangerous daily, and it is very satisfactory to notice that the accidents decrease.

The directors of the Mill Dam Mining Company met at the mine on Friday last, to make arrangements preparatory to the erection of an engine. Mr. Davey, of the firm of Davey Brothers, engineers, Sheffield, attended, and was instructed to forward an estimate of the cost of an engine of about 12 horse-power, so as to test the mine. The new shaft has been sunk about 37 fathoms, and this week the tenders for walling the shaft are to be sent in. It is anticipated that the new shaft will be ready for the engine in March next, and a vigorous effort will be made to have the engine erected by that time. The plans for the reservoir, engine-house, &c., will shortly be prepared, and commenced at a very early date.

We hear that some good ore has been raised from the shaft of the Peak Forest Mine.

The works at the North Derbyshire Mine are progressing satisfactorily, and the engine will be finished early in the new year.

On Monday an inquest was held at Bradbury, near Stockport, on the bodies of two colliers who were killed at the Bradbury Mine, on Saturday, occasioned by a jerk from the engine. Verdicts of "Accidental Death" were returned, and it is intended to take proceedings before the magistrates against the engine-driver.

#### REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT.]

DEC. 23.—The Coal and Iron Trades here continue to be somewhat depressed, at any rate they cannot be reported as active or brisk, generally speaking; there are, however, many exceptions to this, depending on the nature of the coal, &c., produced—for instance, at some collieries producing gas coal exclusively the demand cannot be met at present.

Considerable exertions have been made for some time here, as well as in other districts of the country, to introduce the use of raw coal for locomotives, instead of coke. The high price of coke, of course, renders this a great desideratum. It is, indeed, a subject of much importance, and those attempts have met with success in some instances. The Broomhill coal, produced from a colliery near Warkworth, being situated in the northern limit of this coal field, is highly spoken of for this purpose—little smoke being produced in experiments lately made on the North-Eastern Railway with this coal. We must notice also, in connection with this subject, that Mr. G. W. Jeffrey, of the Hartlepool Iron-works, states that "The boilers recently constructed at those works for marine purposes has demonstrated the fact that North Country coal is more economical than Welsh

coal; and, also, that the former can be consumed without smoke in the ordinary working of the furnaces even by foreign firemen, for the first time on board, when steam was up." This, then, further confirms the numerous reports that have been made to the same effect on the subject, and we have no doubt whatever that the experiments about to be made in Wales with that coal will fully confirm these reports, and settle the point to the satisfaction of all. The consumption of the smoke is a point far too little attended to; it is really surprising the little progress that has been made in effecting this, notwithstanding the numerous experiments that have been made fully demonstrating its practicability.

Considerable difficulty is still met with from water at the Hebburn Colliery, and the pits can only be worked four days per week. The large engine erecting for the purpose of drawing the water is, however, in a state of forwardness, and it is expected to be got to work in a few weeks, when their position will be much improved. The Oakwellgate Colliery, and one of the pits in the Tyne Main Colliery was, it will be recollect, stopped by the water rising in the Low Main seam, nearly a year ago. It is understood that an attempt is to be made shortly to rid those pits of the water, and get them to work again.

A meeting of pitmen was held near Crook on Saturday. The weather was intensely cold, and the attendance thin. The speakers advocated the cause of the Union; but it appears by their remarks that it is not making much progress. This, we submit, shows that, generally speaking, the men see no necessity for such a thing. It would be well if all the coalowners would remove any cause of dissatisfaction among the men on account of deficient ventilation in their collieries. One of the speakers stated that he had worked two years in a pit where no bricks were sent down to make the stoppings for conveying the air into the workings, the result of which negligence was that the candle would not burn in the workings, thus making it extremely injurious to the health of the workmen employed. The Government Inspectors ought to look to these matters. We cannot suppose that the owners of the colliery would allow such a state of things were it brought before their notice.

A dreadful accident took place on the Hetton Colliery Railway on Monday last, the boiler of a locomotive engine having burst, killing instantaneously one man and a boy, and severely injuring three others. The engine was a very old one, being the oldest on the line. The railway plates were torn up for some distance and broken to pieces, and several persons slightly injured.

#### REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

DEC. 22.—The situation of the Iron Trade remains favourable, and since our last the arrival of several fresh orders has given increased confidence to the ironmasters. Slackness is now felt only in particular neighbourhoods, and even in these but partially, while briskness, generally speaking, characterises the principal works. From America the demand is becoming much more animated, but it is from France and Russia that the chief foreign enquiry proceeds. The peculiar circumstances connected with the iron trade in the former country, to which reference has frequently been made in these columns, are highly conducive to the interests of English makers, and those of South Wales derive a large advantage from them. The new lines of railway now being constructed necessitate a constant and considerable supply of material, and no small portion of it is furnished from this district. The Tredegar Works are extensively engaged in orders of this description, and at Ebbw Vale the transactions are also on a large scale. At Nant-y-Glo an excellent trade is being done, and from Blaina similar good reports reach us.

The Coal Trade continues steady, but it is not particularly brisk. Some large vessels have been loading within the past few days, and steam coal meets a ready sale.

On the whole, it must be acknowledged that our position is vastly more promising than at the corresponding period of last year. We were then just entering on a time of great danger, and serious disasters befel many of our firms. The strikes at the commencement of the year aggravated previous misfortunes, and placed more than one house in an extremely perilous position. So sound, however, are the principles and the basis on which the ironmasters seem to be acting, that no firm of any consideration fell, and the only concern to which public attention has been directed is one in the Forest of Dean. The storm did not commit the ravages which might reasonably have been feared, and we can now look forward, we trust, with confidence to a year of great and general prosperity. Something more than mere indications of it have already appeared, and there is every reason to suppose that enterprise and speculation will be more active in 1859 than we have witnessed for many previous years.

The Aberaman estate, Glamorganshire, has often been examined, with the view of finding the No. 3 vein of bituminous coal, but prior to the present time without success. Mr. Crawshay Bailey, M.P., the proprietor, instructed his surveyor, Mr. W. Lewis, about two months ago, to make an effort, and surveys and levellings were accordingly taken. A pit 30 yards deep was sunk, and the vein referred to was "proved" most satisfactorily. Some of the coal was tried in the Aberaman ovens, and the coke produced was equal to the best make in the Rhondda Valley. No slag, or pyrites, we learn has yet been found in the coal. It is supposed that about 350 acres of the mineral are in the property on the spot here referred to.

The experiments relative to Welsh and North Country coal are proceeding at Cardiff at the time we write, and are conducted by Mr. Tamlin, engineer, of the Royal Dockyard, Woolwich, and Mr. Lyne, engineer, of the Royal Dockyard, Portsmouth. The coal tried has been that from Aberdare, and the steamer *Isabella Croft* has been made the theatre of experiment. On Friday, the Aberdare coals were tried with perforated doors, and the same apparatus was used on Saturday for the Newcastle coals. A great many gentlemen connected with the coal trade have suggested that the experiments should be repeated on board a steamer, on a trial trip at sea, thus proving their confidence in the result of the fullest investigation. The conclusions of the Commissioners will not be known till they have reported officially.

An inquest has been opened at Pontypool, on the body of a man who was killed in the Glyn Pit. Deceased was crossing the mine, when a piece of iron belonging to the band fell on his head, and he never spoke afterwards. The enquiry stands adjourned.

#### MANUFACTURE OF COPPER.—No. III.

Passing on to July, 1832, we come to the invention of Messrs. Petreick and Kingston, of Tywardreath and Islington; but this appears to refer simply to the washing of minerals. The water is suddenly let into the vessel from an elevated position, instead of being otherwise introduced. On December 22, 1835, Mr. Nicholas Troughton, of Broad-street, patented a certain combination of apparatus for operating on the vapours evolved from copper ores passing from ovens or retorts, in which the requisite heat for calcination is obtained without permitting the vapour of the fuel to mix with those from the ores, in such a manner that the sulphurous and other injurious matters are condensed and separated, and not permitted to pass

the next important patent is that of Mr. E. Duclos, of Oystermouth. The chief feature of this invention, so far as regards its application to the manufacture of copper, was that it admitted of either rich or poor ores to be treated without admixture, it being usually thought that ore must be reduced to a certain percentage in order that it might be successfully smelted. He first extracts a portion of the sulphur from the ore by distillation out of the reach of air; leaving, however, sufficient sulphur to form sulphates. To effect this conversion a peculiar form of apparatus is used, which can only be described by drawings. The patent, however, was fully described at the time in the *Mining Journal*.

Another patent, obtained by Mr. Troughton, follows; its object is to obtain sulphur in the process of roasting copper ores, in place of permitting the vapours thereof to escape into the atmosphere. The second part of the invention relates to the obtaining of sulphuric acid by the combination of vapours produced in roasting copper ores in the processes of obtaining copper therefrom. In 1839 Mr. Charles Schafhauti claims the mixing of the ores with bodies of an alkaline nature, which have an affinity for sulphur, in order to decompose the sulphides, or of mixing the same alkaline bodies and carbonaceous matters to decompose the carbonate of copper. But his claim does not extend to the use of alkaline or carbonaceous matters as then used. He also claims as part of his invention the causing the air which has passed over the heated ore in the calcining chamber, mixed with

the rising fumes and steam, to pass through the fire-grate of the same furnace, connected with the calciner by its own action, or through a separate furnace, before it escapes through the chimney.

On May 22, 1839, Mr. W. Jefferies, of Mile-end, claims a method of submitting the ore to a slow process of calcination or roasting by the employment of a small quantity of fuel, kept in a state of slow combustion by the regulated admission of atmospheric air, and after such roasting allowing the ore to remain for several days in a mixture of alkali and water exposed to the atmosphere, when it will be found ready for smelting in the reverberatory furnace, the metal being in a much more advanced state in its progress towards purity than by any of the ordinary modes of smelting. On the same day Mr. Troughton patented an improved construction of retorts and furnaces for calcining ores in the process of obtaining copper; and secondly, a mode of smelting copper by means of blast. He also claims an arrangement for obtaining copper by dissolving out the metal by sulphuric acid. On June 22, in the same year, Mr. Edward Brown, of Whitrock, Swansea, obtained a patent under which he claims the use of any portion of lime in combination with any other matters or substances whatever in roasting, or in refining copper ores. The last patent, in 1839, referring to the manufacture of copper, is that of Mr. Thomas Bell, of St. Austell, which related to obtaining copper from the slag. The slags were crushed, granulated in water, and the fine copper separated by washing.

Mr. W. I. Cookson, of Newcastle-on-Tyne, appears next on the list, he having obtained a patent on Jan. 5, 1840. The invention is applicable to the treatment of sulphides and oxides of copper. From the sulphurous ores he obtains the metal and sulphuretted hydrogen gas, and from the oxide ores he obtains the metal. He describes five distinct processes:—1. When the sulphurous ores contain a large proportion of iron and sulphur, and little earthy matter, he reduces the sulphide of iron to proto-sulphide by distilling over sulphur. By dissolving the iron in the proto-sulphide in hydro-chloric or sulphuric acid, he obtains sulphuretted hydrogen gas and muriate or sulphate of iron. The sulphide of copper and the silver, if any, remain undissolved, and metallic copper may be obtained from the sulphide by the means usually employed to obtain metallic copper from native copper ores; but by means hereafter described, he can obtain from the undissolved residuum metallic copper and sulphurous acid, and also any silver which may be therein contained.—2. He roasts the sulphurous ores at a bright red heat whilst exposed to the action of the atmosphere, until the sulphides of iron and copper contained are converted into oxides, and mixes the roasted ores with muriatic acid to obtain muriate of copper.—3. He roasts the ore, as in Process 2, but discontinues roasting when the greater part of the sulphide of iron has been converted into oxide. The copper remains as sulphide, and by exposure to the action of atmospheric air at a suitable heat the sulphide is converted into sulphate, and the remaining sulphide of iron becomes oxidised. He then separates the sulphate of copper by dissolving it, and thus obtains oxide of iron (from which metallic iron may be obtained) and sulphate of copper, from which he obtains metallic copper and sulphurous acid.—4. He roasts the sulphurous ores, as in Process 3, until about one-half of the sulphide of iron has been converted into oxide, no part of the sulphide of copper being converted into oxide. He then fluxes the roasted ores in mixture with carbonaceous matter, and thus obtains a regale, containing sulphide of iron in the state of proto-sulphide, capable of being decomposed by acids, and sulphide of copper and silver, if any. He then dissolves iron contained in the regale by muriatic or sulphuric acid, and thus obtains sulphuretted hydrogen gas and muriate or sulphate of iron. The sulphate of copper and silver, if any, remain undissolved, and metallic copper may be obtained, as in Process 3.—5. This process is applicable to oxide ores only. By digesting these with muriatic or sulphuric acid he dissolves oxide of copper, and obtains either muriate of copper, from which metallic copper may be obtained, or sulphate of copper, from which metallic copper and sulphurous acid may be obtained, according to Process 3.

In July, 1840, Mr. W. Jefferies obtained another patent, under which he claims a mode of smelting copper ores by treating the melted metal with carbon, or with an alkali. This brings us to the end of 1840.

**THE TYLDESLEY COLLIERY EXPLOSION.**—The inquest on the 25 persons killed by the explosion at this colliery is now concluded, and a verdict of "Accidental Death" has been returned, the jury expressing their unanimous opinion that due precautions have not been taken to ensure the lives of the workmen employed in the mine; finding that the ventilation of the mine has been generally imperfect, more especially from the area of the outlet airways being much too small. They also were of opinion that there had been great want of practical knowledge of the working of the mine on the part of the underlooker, and also that the firemen had neglected their duties. Perhaps the most important of the evidence taken was that of Mr. Joseph Dickinson, the Government Inspector of Coal Mines. Soon after the accident Mr. Dickinson went down the pit and investigated the circumstances under which the explosion took place. He could not offer any opinion as to where the gas was lighted, but it did not appear to have been at any of the points where open lights were allowed. It must, therefore, either have been lighted at an open safety-lamp, or through a defective one. Some of the safety-lamps are blown to pieces; and it is impossible to say whether or not they were in good order at the time. Of those which remain, some are certainly not in such good order as they should be. Some of the screws have the thread much worn, and one or two of the pricker holes seem too large for safety. It appears that blasting with gunpowder was allowed. He had examined all the working faces where the gas is likely to have been lighted, but could not find, nor could he hear of, any place where a shot has been recently fired. He thought that it must have been lighted at an open or defective safety-lamp. The lamps were not locked, and could, therefore, be opened by any of the men. He had examined the lamps, but could not pass flame through them. No one could give any information as to their previous state. As to the ventilation of the colliery, he had measured the air, and found there is rather less than 6000 cubic feet per minute for the whole of the workings, on both the east and west side. The eastern split traverses about 1340 yards, and the western split about 3340 yards. The air is split at the bottom of the engine brow, the east current being brought over the engine brow by an air crossing, and united to the west current in the back brow there, both splits going together up the back brow, or return air course, to the up-cast shaft. Where the air of both splits is together in going down the engine brow, there is an area of about 39 square feet; but the return air course, where both splits are together, has been allowed to squeeze and fall, until now the area at the smallest part is only 6 ft. This is so small that he did not think that at the time of the explosion there would be more than 6000 cubic feet of air passing from the whole of the workings; and there would also be considerable escapes—first at the door on the first level, which, when it opens, allows air to escape without going into the second level and its workings and into the No. 2 jig brow. This is an important door, and it is only single. Then, again, tarpaulin cloths alone have been relied upon in many places without there being any air-door; for instance, the whole of No. 2 jig brow and its levels are dependent upon one cloth. He did not think there could be an adequate amount of ventilation constantly produced to dilute and render harmless noxious gases to such an extent as that the working places of the pits and levels of the colliery could have been under ordinary circumstances in a fit state for working, as required by the first general rule of the Inspection Act, and which is required to be observed by the owners or their principal agent, and could not be deplored to others. The workmen—at all events those who understand fire-damp, and worked in the far ends of the Nos. 1 and 2 jig-brows—must, in his opinion, have been aware that such was the case, and it is to be regretted that they did not give him any intimation of what was going on. Without such co-operation on the part of the workmen it is physically impossible for the Inspector to find out any but a very small proportion of the places where danger exists, and where it admits of being removed. He wished this to be distinctly understood; and to show that such is the case, he might state that there are in his district, in round numbers, 400 working shafts—this Tyldesley, where the explosion has taken place, being one of them. Also 100 breast-eyes, whereby workings are carried on the same as in the pits, making a total of 500 coal-works. Besides these, there were 250 air and ladder pits, making 750 shafts and breast-eyes in actual use; in addition to which there was a large number of old pits, either out of use or only used for ventilation. There are about 500 steam-boilers, winding-roads, catches, guides, &c., besides underground engines. The underground galleries alone are between 4000 and 5000 miles long, and there are about 30 miles of underground canals. The galleries and the cut-throughs, through which the air passes, are constantly being changed. The galleries extend over a wide district, and to visit them all would involve a surface travelling of about 12,000 miles, which would have to be accomplished in short journeys of about 25 miles per day. The duty of Inspectors is not to take upon themselves the management of collieries, but, as far as they can, to see that the managers do their duty. The responsibility as regards the carrying out of the first general rule rests solely upon the owners and their principal agents. There was no viewer at this colliery combining practical and scientific knowledge, as he had over and over again recommended that there should be generally throughout his district, though not individually to the proprietors of this mine. Had there been such a person he did not think the airways would have been allowed to be closed up as they were; nor would the pillarings have been going on, forming the three goaves to which he had alluded, and which is a system that was discontinued to his knowledge 20 years ago, and replaced by the system of panel-work introduced by the late Mr. Biddle, the return air from such work being carried into the return air course without having to pass through the new workings. This is understood by viewers, but not by commercial men, who sit in their offices, and give orders to their under-viewers, without going down into the mine to see whether or not those orders can be safely carried out. A similar system is being pursued in several other collieries in this district: and explosions of even a worse character may occur. Great responsibility is incurred by owners in not having a proper viewer to superintend the operations. With regard to the lamps being unlocked, he might say that there is a prejudice amongst the men against having them locked. He was sorry it should be so; and, in his opinion, no colliery owner does his duty who works a colliery of this sort, unless he has all the lamps locked.

**CURIOS COLLIERY ACCIDENT.**—The *Alloa Advertiser* states that J. Hunter, a miner, entered into one of the colliery tubs or hatches, intending to descend a pit at Kineton Village. After proceeding a short way down the pit the lowest iron hoop of the hatch fell off. Hunter feared the worst, but, ere he had time for reflection, went to the bottom of the hatch, and Hunter himself was precipitated to the bottom of the pit, a depth of 14 fms. After some delay the unfortunate man was again hoisted to the surface, and he was found to be little injured, and was able to walk home with a little assistance.

**WYLM'S STEAM FUEL COMPANY.**—The payment of the call of 57 per share, made by the Master of the Rolls, is summarily ordered

## MINING IN IRELAND—ROUGH NOTES.—No. VIII.

Returning westward through the Roughty Valley our attention was directed to a remarkable rock of limestone, about one mile south of the Roughty-bridge, and also a mile south of the limestone formation. This isolated rock is found at an elevation of 500 feet above the sea level, and resting on clay-slate, and calculated to be upwards of 100 tons. The Laurustinus, arbutus, and other shrubs grow in the crevices of this remarkable rock, which, in character and appearance, resembles the limestone of Muckross and Killarney. It is locally known under the name of Clackvorragh, but by what means it reached its present elevated position we are unable to determine. A pleasant walk of about a couple of miles brought us to the town of Kenmare, where we found every comfort at the Lansdowne Arms Hotel. Kenmare is 21 miles from Killarney, and being situated midway between Killarney and Glengariff, it is much frequented during the summer months by tourists. A mail car arrives every day at 10.30 A.M., and leaves at 2 P.M.; so that Dublin may be reached in 12 hours from this remote part of the southwest of Ireland. About a mile to the west of Kenmare, and at the north side of the river, we find a continuation of the lead lodes, and also extensive excavations, which are plainly traceable a distance of more than six miles. These ancient works have been in abeyance since the year 1688. Rich specimens of galena, blende, gossan, &c., may be seen scattered about near these ancient mines. Vessels of 250 tons may find safe anchorage within a distance of 150 yards of the works, and water-power may be applied to an unlimited extent. At the south side of the river, and near the suspension-bridge, we saw several tons of rich copper ore, which had been quarried from the lodes. Passing on to the west from Kenmare we find the Castles of Dunkerron and Dromore. This locality is beautifully wooded, and the view from Dromore Castle and grounds—the splendid residence of R. Mahony, Esq., D.L.—which overlooks the beautiful sheet of water forming Kenmare River, with the bold and picturesque mountains at the south of Gleninchquin and Glenarastill, is of surpassing interest and beauty. A short distance below Dromore Castle, the Little Blackwater River flows into the Kenmare Harbour. This river is crossed by a very ancient bridge, from which we saw numbers of salmon and white trout make astonishing leaps over ridges of rocks, in order to get to the freshwater. This beautiful spot is scarcely known or frequented; but the jolly anglers and tourist will here find sport to their heart's content. We were introduced to a gentleman who, in one day, killed 17 salmon. There is a comfortable hotel close at hand, and we are sure it would be difficult to find such a charming place as the Little Blackwater. Soon after leaving the Little Blackwater we find a very striking change in the appearance of the country—the mountains towards the north are bold, bare, and rugged; and, with the exception of the woods about Derryquin Castle, we find but very few trees west of Sneem. Sneem is a small village about 16 miles to the west of Kenmare, and situated at the north side of the Kenmare river or estuary. The harbour of Sneem is safe and landlocked, where vessels may lie in 4 fathoms water, or in the entrances may ride in 10 fathoms. The Dunkerron Mountain range commences near Kenmare, and terminates in lofty mountains above Derryrane, from which point their general direction is north-east, nearly parallel to the northern shore of the estuary of Kenmare. Between the main range and the shore of this arm of the sea there are numerous lateral valleys, drained by mountain streams running nearly north and south. Turning off to the north through one of these lateral valleys we find Loch Carron, which is a considerable expanse of water, and occupies the lower portion of the valley of Glenar, above which, in the recesses of the mountain, are the villages of Blackstone and Carranore. These mountains abound with iron ore, which was formerly smelted in considerable quantities at Blackstones, in works erected by Sir William Petty; but the supply of timber having failed, these extensive works were given up about the year 1750. Throughout this district the only spots of cultivated ground are either on the sea coast, the banks of rivers, or along the upper margins of the bogs, which universally occupy the valleys to a considerable height up the acclivities of the mountains. And in this barony alone (Iveragh) there are upwards of 43,000 statute acres of bogs. We understand that these valuable iron mines are to be worked again, and that it is in contemplation to smelt the ore with peat. Arrangements, we believe, for a lease on liberal terms have been made, and, from the quantity of ore to be found in these mountains, there appears to be every prospect and element of success in this great undertaking. Proceeding across the mountain near to Derryrane, the late residence of O'Connell, we find at an elevation of 1200 feet above the sea level, in the south-west extremity of the Dunkerron mountain range, large quartzite lodes, running nearly east and west, and containing fine specimens of copper ore. Some superficial excavations appear to have been made, and as these large lodes may be worked to a great extent in length and depth without machinery, by means of adit levels, we learn that it is the opinion of several eminent mining engineers, who have surveyed this extensive property, that it has every appearance of soon becoming a valuable mine. Water-power for crushing and preparing the ore for market is abundant, and the roads are of the best description. We have found during our journey through the counties of Cork and Kerry the hand proprietors anxious and willing to lease their mineral properties on fair and liberal terms, which are found in the great clay-slate mountain range. These mines, we understand, have been at work upwards of 40 years, and have produced millions worth of copper ore. There is no granite within one hundred miles. The splendid copper mines of Knockanahon are also found in the great clay-slate formation which traverses the south part of the county of Waterford, and the south-west of the counties of Cork and Kerry; it, therefore, does not follow as a general rule that some of the best copper mines in the world may not be found 100 or 500 miles from granite.

**THE LEAD MINING DISTRICTS OF YORKSHIRE.**—At the West Riding Geological and Polytechnic Society meeting, Mr. James R. Eddy, of Carlton Grange, near Skipton, read a paper on this subject. He began by saying that, in comparison with the great coal fields and ironstone beds of Yorkshire, the lead-producing districts of this county seemed trifling, yet, in consideration of the large population dependent upon the mining and manufacture of lead, they formed necessarily a subject of great interest. He could not say when mining was first commenced in the county, but veins were worked at an early period, as appears both by the Roman explorations frequently met with, and the discovery near Pateley Bridge of two pugs of lead inscribed with the name of the Emperor Domitian, and bearing date A.D. 82. It was not improbable that the mines of this district were worked at a still more remote period by the ancient Britons. In the earlier period of lead mining the discovery of a vein entitled the party finding it to a grant or license to work on a certain length of such particular vein. By this practice, each vein became regarded as a distinct holding. But this plan of letting was so productive of inconvenience, and often of litigation, that it was at length given up at a comparatively recent date. Capitalists embarked in mining, works were extended, and machinery was introduced in the working of mines. This involved grants on a larger scale, and small holders disappeared, and hence came the custom of granting sets (as they were called) of certain extent, defined by fixed boundaries, as in Devon and Cornwall. Generally speaking, the various lead mines which constituted such an important portion of the mineral treasures of Great Britain, were situated in barren and rugged elevations, and in this respect those of Yorkshire were no exceptions. All the lead mines in this county were to be found within a boundary of 700 square miles, which included the high and uncultivated districts bounding Airedale, Wharfedale, Nidderdale, Wensleydale, Arden, and Swaledale. The strata throughout the whole of this area were (like those of the great lead-bearing districts of Northumberland, Cumberland, and Durham, and also of Derbyshire) the lower members of the carboniferous series. All the same class of rocks prevailed throughout our lead-bearing districts, yet each individual stratum was found to occur even in mines in the immediate vicinity of each other, and when they did exist, their thickness was frequently found to vary considerably. It was, therefore, impossible to make a section to correspond with every mining district, or even to hold good throughout a single mining field. Mr. Eddy, in a very interesting manner, proceeded to illustrate, by means of various sections, that even in situations close to each other the thickness of the beds varied considerably, and also that the veins were frequently varied, complicated, fantastic, and curious, often rendering the calculations of the miners doubtful and uncertain. The lead mines of this county were treated as belonging to two great mineral districts—the northern and the southern. In each district there were the rake, the pipe, and the flat veins. The ores from the flat and pipe veins were generally found more fusible in the furnace, and to yield a higher percentage of lead than those from the rake veins, and the ores from the limestone, whether produced from the rake, pipe, or flat vein, were found to be more easily reduced, and to make a much better quality of metal for white lead than those from the gritstone. Contrary to what has been held, "sliekenites" have been found in gritstone in the Grassington Mines, and with the exception of one presented to the Duke of Devonshire, a finer specimen was, perhaps, never found than that now produced. Mr. Eddy, after showing that mining for metallic minerals, whether in primitive or secondary formations, was of a much more uncertain and speculative character than for coal, concluded thus:—In all mining districts, but especially in a stratified country, the phenomena presented by veins—their frequent heaves and dislocations, and their varied appearance when bounded by different rocks, call for very close attention, and even a dependence upon knowledge acquired in one district may prove fatal in another. The miner should be perfectly acquainted with the nature of those substances which it was his daily task to seek in the bowels of the earth, as well as with those which, perhaps worthless in themselves, generally indicate the presence or absence of the immediate object of his search. Long and practical experience, combined with a knowledge of geology and mineralogy, could alone furnish him with this requisition, and it was, therefore, essential to success. A few enquiries were made, and answered by Mr. S. Eddy.—Mr. W. S. Ward read from a paper entitled "Statistical Returns of the Mineral Produce of Yorkshire for the Year 1857," by Mr. Robert Hunt, F.R.S., Keeper of the Mining Records, an account of the produce of lead from the various mines in the country during the last year. The total quantity of lead ore produced was 12,405 tons 19 cwt., and of lead 7875 tons 12 cwt. The produce of lead ore and lead in Yorkshire were, in 1856, respectively 12,174 tons 7 cwt., and 8396 tons 2 cwt., showing an increase of 231 tons 12 cwt. on the ore, and a decrease in the quantity of lead produced to the extent of 1110 tons 10 cwt., proving that the ores raised were less metalliferous than in the previous year. The estimated value of the lead produced in Yorkshire in 1857 was 173,250.

**THE SHIPS OF THE ROYAL NAVY.**—At the Society of Arts, Mr. E. J. Reed, Editor of the *Mechanics' Magazine*, read an interesting paper on the modifications which the ships of the Royal Navy have undergone during the present century in respect of dimensions, forms, means of propulsion, and powers of attack and defence. Drawing a comparison between iron and wooden ships, he says:—"In the construction of mercantile vessels iron is superior to wood. Iron ships, as compared with wooden, may be built lighter and stronger, of greater capacity, of superior speed, increased durability, and at a less cost both for purchase and repairs. In Great Britain, moreover, iron is much more abundant than wood, and its manufacture is now becoming improved almost daily. On the other hand, the bottoms of iron ships get rapidly foul, and their hulls when of moderate thickness are shattered by the action of shots much more injuriously than the hulls of wooden ships. The first objection is got rid of in merchant vessels by cleaning their bottoms when they come into port, which they frequently do, and the second is, of course, not directly applicable to them; but the rapid fouling of the bottom of a vessel of war, which is often engaged for years together, far from all facilities for cleaning her below water would at all times be a highly injurious and often a fatal evil." Mr. Reed made the following noteworthy statement:—"And here I may be permitted to mention a remarkable idiosyncrasy of the Lords of the Admiralty—they consider it their special function to deny to the British press and the British public, and to the natives of minor states from which we have nothing to apprehend, information and facilities for gaining information which they cheerfully accord to officers of the French, Russian, and American Governments, those which can by any chance prove injurious to us. I have known Russian officers, in particular, have authority to pass freely over our dockyards, while British officers are refused permission to enter the gates, even to see a ship launched, and while Englishmen have to go about under the surveillance of a policeman, and needlessly secretive to innocent Englishmen, it has the effect of occasioning much unnecessary and injurious babbling in newspapers and elsewhere." Mr. Scott Russell confirmed what Mr. Reed said, and added something still more remarkable. He said that, by orders of the late Board of Admiralty, a report had been drawn up by a com-

mittee, one of whom (Mr. Chatfield) was in the room, as to the principles on which the future fleets of England were to be constructed. The existence of this report naturally produced great anxiety in the mind of Scott Russell, and others like him engaged in naval architecture, to procure a copy. He tried every means to obtain one, and failed. But at last he succeeded, and did get one—from the Continent!

**MANUFACTURE OF IRON.**—Mr. Joseph Maudslay, Lambeth, proposes to impart motion to molten iron by inclining the bed of the furnace containing it, and causing the bed to rotate by means of any suitable motive machinery, in order to improve the tenacity and fibrous quality of the iron by mixing or agitating it, and thus facilitating the escape of its gaseous impurities.

**STEEL CASTINGS.**—A method has recently been devised by which wrought-iron can be melted and poured into moulds, producing castings with all the toughness of wrought-iron and beauty of cast-steel. Scrap or wrought-iron, or bars or plates, cut into small pieces, may be employed; these are melted in a suitable crucible, and  $\frac{1}{2}$  per cent. (by weight) of charcoal, 1 per cent. of manganese, and 1 per cent. of red ammonia are added. The whole is covered from the atmosphere, and melted in a temperature of about 1500° Fahr., which temperature is maintained for three hours. The metal is then poured into moulds, and will be found to be so malleable as to be capable of being treated under the hammer.

**PRECIPITATION OF COPPER IN SOLUTION.**—Mr. S. Higgs, jun., Penzance, in separating and precipitating copper from water having it in solution, places the water on tanks of wood or other suitable material, together with scrap-iron, and the water is heated by steam or otherwise, it being preferred to employ jets of free steam.

**MANUFACTURE OF TUBES AND CYLINDERS.**—Mr. A. Parkes, Birmingham, in place of employing hollow cast cylinders of copper, German silver, or other alloys of copper, uses cast discs cut from comparatively thick sheets; he subjects such discs to a raising process in a furnace similar to what is now practised in respect of the sheet metal by forgers worked by fly presses, or the discs may be forced by the steam forces into hollow dies, such as are used when stamping sheet metal.

**STEAM TUBE GENERATOR.**—Mr. L. Durand, Marseilles, proposes a steam generator composed of one upper and two lower longitudinal tubes of comparatively large diameters, and communicating with each other by means of a number of very small tubes of comparatively large diameters, and communicating with each other by means of a number of very small tubes arranged side by side transversely, and in a serpentine or zigzag form.

**SAFETY VALVES.**—Mr. R. Illingworth, Blackburn, has patented an invention which consists of a compound safety valve, for the prevention of boiler explosions from excessive pressure or deficiency of water, to accomplish which he employs a hollow equilibrium valve, placed in a suitable chamber, so that when the steam escapes, in consequence of its being above the working pressure, it may pass from the upper seating of the valve to the exterior, and from the lower seating through the hollow or centre of the valve, both discharging into the atmosphere, a still greater pressure opens the valve to its full discharge power.

**STEAM-BOILERS.**—Mr. Robson, Pimlico, has patented an arrangement, by which the heat from the furnace is more fully utilised before being allowed to escape. The arrangement employed is a series of horizontal and vertical tubes placed between the fire-grate and the stack or chimney.

**SMOKE-CONSUMING GRATE.**—An important invention has lately been patented by Dr. Bartlett, of 7, King's-road, Bedford-row, who has, with great success, brought into use a smoke-consuming grate. It can be managed without the slightest difficulty, being arranged in a most simple manner, and its action is so complete that not only does it burn every atom of smoke, but effects a vast saving of coal, and can be applied to furnaces and engines as well as to common grates.

**CONSTRUCTION OF IRON SHIPS.**—Mr. W. Simons, Glasgow, proposes to arrange the deck beams of ships diagonally, so as to gain superior strength. The invention also relates to the diagonal disposition of the stanchions, each stanchion, or hold fast beam or bar, being inclined diagonally, the lines being reversed to each other. The invention also comprehends the inverting or reversing the knees of the ship—that is to say, the knees are disposed above instead of below the deck, and iron plates are laid over the lines of knees throughout the ship fore and aft.

**COATING SHIPS' BOTTOMS.**—A composition for preserving wood or metal against the action of sea water has been patented by Mr. J. A. Clarke, Liverpool. The materials he employs are white lead ground in naphtha, to which is added resin varnish, affording a paint-like composition, capable of being used either hot or cold, and which may be, when required, combined with oxides or salts of iron or copper, and pitch, tar, or coloring materials.

**RAILWAY TURN-TABLES.**—Messrs. Martin and Light, Great George-street, propose to combine a solid or dead bearing for railway turn-tables when not in action, with the use of rollers, upon which they may freely move when required for turning carriages or wagons; these rollers being at such a level that when the table is on its solid bearing it is not in any way supported upon them. Their second improvement consists in keeping the table just free from its bearings by counterbalance weights.

**FOURGASSIE'S CLOD-CRUSHER.**—Mr. Henry, patent agent, has recently specified a combined cloid-crusher, roller, scrapper, &c., consisting of a number of heavy wheels, having curved teeth on their peripheries, and doing their work independently, though mounted on a common axis, combined with an adjustable rocking frame, carrying clearing blades.

**SOLUBLE GLASS.**—Some difficulty having been experienced from this material washing off when applied as a coating, it has been suggested that after a coating of the silicate of soda has been applied, and has become dry, it should be washed over with very dilute muriatic acid. Muriate of soda (common salt) is formed and washed away by the first shower, and an insoluble coating remains.

**FILING THE ENDS OF FISH PLATES, &c.**—Messrs. Brown, Ebbw Vale, have patented an invention, the object of which is to remove the burr left on the ends of fish plates, rails, and other articles by the action of the saw. The invention consists in using rolls turned of such a figure that they are similar to those in which the articles were made. These second rolls are then roughed, to act as a file, and the article being passed through has the burr taken off, but is not otherwise acted upon.

**NEUBIAN OILS.**—According to an invention by Mr. Hill, of Greenport, N. Y., some coal-tar and crude turpentine, in equal parts, are first heated together, and treated with 5 per cent. of sulphuric acid, then washed with hot water to remove the free acid, after which they are placed in a still, submitted to a temperature of from 150° to 212°, and some hydrogen gas and air forced into the still through tubes. The vapour which passes over in this distillation is condensed in the usual manner, and forms a fluid denominated by the Inventor Fluid No. 1. By placing 1 oz. of  $\frac{3}{4}$  oz. of sulphuric acid, and 4 ozs. of water in a jar, and then pouring upon them  $\frac{3}{4}$  pints of crude resin oil, 1 quart of coal naphtha,  $\frac{1}{2}$  oz. of Canada balsam,  $\frac{1}{2}$  oz. of camphor, and 1 quart of benzene, forms Fluid No. 2; the substances are closely confined in a jar for several hours, then decanted off, and treated with chalk to neutralise the free acid, after which the fluid becomes clear by repose. Fluid No. 3 is obtained by distilling India rubber in a retort at 600°, condensing the vapour, and obtaining crude caoutchouc, which is twice distilled afterwards at low temperatures, and a very volatile hydro-carbon obtained. These three fluids are afterwards mixed together in different proportions, according to the quality of "Neubian oil" required.

**NEW GELATINOUS MATERIAL.**—It is announced in foreign papers that Prof. Schetzer, of Zurich, in Switzerland, has discovered that a strong solution of the sulphate of copper, into which an excess of ammonia has been poured, will dissolve cotton and convert it into a sort of gelatinous substance, something like collodion.

**SUBSTITUTE FOR RED LEAD.**—An invention, based on the discovery and application of a certain earth or ochre, to which the name of Burgundy red has been given, has been patented for Messrs. Bouchard and Clavel, of Paris. This red ochre is very rich in silica and alumina, and is found on the estate of La Grunerie, in the commune of Fontenouille, Canton of Charney, department of Yonne, France; but it is probable that ochre of the same or very similar quality may be found in other parts, the inventors wish to reserve to themselves the application of such earths or ochres in general to the preparation of the substitute for red lead. The composition of this ochre (Burgundy red) is:—Silica, 50-60 parts; oxide of iron, 14-50 parts; alumina, 26-60 parts; carbonate of lime, 7-60 parts; sulphate and phosphate of lime, magnesia, loss, 1-30 parts;  $\text{CO}_2$ , 100-90. A cement may be prepared with this earth which may be used with considerable advantage as a substitute for red lead in making the joints of boilers, water and gas pipes, and other joints, by mixing the said earth with grease, oil, lime, and with fragments of unburnt earthenware, Roman cement, and chalk in about the following proportions:—Burgundy red, 66 parts; grease or oil, 15 parts; lime, 11 parts; unburnt earthenware, chalk, or Roman cement, 8-100. This Burgundy red, or other analogous earth, may also be used very advantageously as a coating for preserving metal to prevent oxidation, by simply diluting it with volatile oil.

**AMERICAN RAILROADS—QUALITY OF IRON.**—One of the causes of the existing bad condition of the treasures and tracts of many railroad companies throughout the United States is well shown in the *United States Railroad and Mining Register*. In original construction the cost of rails is a large item, and in the maintenance of permanent way, renewal of iron is a source of great expenditure, and as this expenditure fluctuates according as the quality of new iron used in the construction and in repairs is good or bad, great care should be exercised to secure a superior article, thereby to ensure durability in use. It is not enough to condemn iron to say it is of British make, nor to commend it to say that it is of American manufacture, for bad iron and good iron are made in both countries—as numerous existing ways attest; and hence engineers and presidents who negotiate for iron for new roads, and superintendents who negotiate for iron for repairs, have ever open to them opportunity to buy American or English rails, good or bad, as they may elect. Their data establish an important truth—that the wear and tear of iron of good quality imposes only a moderate outlay for repairs, and that rails exposed to a heavy traffic are less perishable and more durable than public opinion has heretofore adjudged. From a comparison of the returns made by the "Master of Road" of the Pennsylvania Railroad, and of the Baltimore and Ohio Railroad, it appears that while on the Pennsylvania Railroad from September, 1849, to November, 1857—but 2614 miles of rails were renewed, being but 57-710 per cent. of the entire length of main tract and sidings, there were renewed on the Baltimore and Ohio Railroad, in three years, 2411 miles of tract, being 42-94 per cent. on the entire length of tract and sidings; also that, while on the Pennsylvania Railroad the quantity of rails renewed was 2637 tons, being equal to 1 per cent. per annum of the total tons of rail in use, there were renewed on the Baltimore and Ohio Railroad, in three years, 23,558 tons, being equal to 13-97 per cent. per annum of the total tons of rail in use. It is but fair to state that nearly the whole of the rails used by the Pennsylvania line were manufactured by Messrs. Peebles and Co., of the Phoenix and Safe Harbour Ironworks.

**NORTH-WEST AND SOUTH LONDON JUNCTION RAILWAY.**—We have received from the secretary of this company a prospectus of the project. It is proposed to raise a capital of 700,000*l.*, in 10*s.* shares, deposit 1*s.* per share, but the total cost is estimated at 600,000*l.*, giving a margin of 100,000*l.* In the allotment of shares the London and North-Western and the North London Railway Companies, to whom the issue of the prospectus, excepting the press, is at present confined, are to receive preference, and for this reason—the proposed railway has the sanction of the board of directors of the London and North-Western and North London Railway Companies, each of which have nominated two of their body to sit upon the new board of directors, and the London and North-Western directors have determined to contribute from 100,000*l.* towards the required capital. The proposed railway is to proceed from the present Kensington station of the West London Railway, and to have junctions with all the existing lines south of the Thames, but also giving to the inhabitants of Bayswater, Notting Hill, Shepherd's Bush, Kensington, Hammersmith, Chelsea, Fulham, Battersea, Wandsworth, Clapham, Brixton, Camberwell, Peckham, and other suburban districts, the advantage of frequent and cheap

access by trains to the City, West-end, and northern and southern parts of the metropolis respectively; and as regards the West-end in particular, affording superior advantages to those now enjoyed by the inhabitants of the northern side of the Thames by means of the North London Railway, with which the proposed line will be in communication.

**HANDBOOK OF RAILWAY LAW.**—Under this title Mr. Arthur Moore, the secretary of the Dublin and Wicklow and Kingstown Railways, has issued (through Messrs. W. H. Smith and Son, of the Strand) a very elaborate compilation, bearing upon the law of railways. The work contains the public general railway Acts passed during the last 20 years, prefaced by a good introduction, containing statistical and financial information, and a copious analytical index. The 35 principal Acts are given *in extenso*, and the book contains, therefore, 500 pages, to be valuable to those members of the legal profession who, from their connection with railways, require all the acts bearing upon the subject in a portable and convenient form.

**NORTH OF ENGLAND INSTITUTE OF ENGINEERS.**—The sixth volume of the *Transactions* of this institution contains a vast fund of valuable information. The Remarks on the Ore and Ironstone of Rosedale Abbey, Yorkshire, by Mr. Jos. Bewick, which occupies the first portion of the book, is well illustrated with a plan of the drift, the section of the dyke, and section of the ironstone, so that the paper is rendered more easily intelligible. Both this and the following paper, On the Coal Field of New South Wales, have already been referred to in the Journal—the plans of the harbour of Newcastle, N. S. W.; the map of the portion of New South Wales under consideration, with the ideal section of the coast line from Wollongong, Illawarra, to Port Stephens; the sections of Khamarin, Raymond Terrace, and Signal Hill; the diagrams of the flora and fauna in the coal; the plan showing the collieries on the Hunter River, and the plan of the Moreton Bay district, of course, greatly enhance the value of the latter treatise, by rendering the most minute details clear and distinct. We next come to Mr. T. Y. Hall's Notes on the Production and Consumption of Coal in France, which is certainly one of the most interesting historical papers that has been brought before the Society. This is followed by M. Laurent's Treatise on Lemelle's System of Ventilation of Mines, which has already been commented upon in the *Mining Journal*. Two papers by Mr. J. J. Atkinson—one On the Comparative Consumption of Fuel, the other On the Proportions in which Air in Mines distributes itself—follow next in rotation; and a communication by Mr. Wales, On the Lund Hill Accident, and the Ventilation of Coal Mines generally, concludes the volume. We believe that a cheaper series of essays upon subjects connected with practical mining cannot be obtained.

\* The several volumes of the *Transactions* of the North of England Institute of Mining Engineers may be had at our office. Price 2*s.* per volume.

**THE COLLIER GUARDIAN, AND JOURNAL OF THE COAL AND IRON TRADES.**—We learn that

STEPHENSON MONUMENT.	
Amount of subscriptions already advertised	£3674 0 0
Messrs. Holkow and Vaughan, Middlesbrough	100 0 0
Joseph Locke, Esq., Westminster	50 0 0
Messrs. W. H. Lambton and Co., Newcastle	50 0 0
Benjamin C. Lawton, Esq., Newcastle	50 0 0
James Gow, Esq., Mount Villas, York	50 0 0
The Bowring Iron Company, Bradford	50 0 0
Messrs. Smith, Biscoe, and Tannett, Leeds	50 0 0
Subscriptions of workmen employed in the locomotive department of the North-Eastern Railway	36 18 4
Henry Silverton, Esq., Minster Acre	25 0 0
Messrs. Palmer Brothers, Newcastle	25 0 0
John Rawes, Esq., and Partners, Newcastle	25 0 0
Samuel Carter, Esq., Westminster	25 0 0
Hugh Taylor, Esq., London	25 0 0
Messrs. Anthony Lanning and Co., Leeds	25 0 0
John Durstane, Esq., London	25 0 0
John Sheld, Esq., Stote's Hall, Newcastle	21 0 0
Messrs. Bayne and Burn, Newcastle	21 0 0
The Trustees of the Coal Factors' Society, London	20 0 0
Lord Harry Vane, M.P.	20 0 0
Frances Anne Vane, Marchioness of Londonderry	20 0 0
Messrs. Christopher Simpson and Sons, Hull	20 0 0
Richard D. Shatto, Esq., M.P., Durham	20 0 0
The Washington Chemical Company, per J. Lowthian Bell, Esq.	15 0 0
Richard Granger, Esq., Newcastle	10 10 0
James Fenton, Esq., Low Moor, Bradford	10 10 0
Messrs. W. and C. Burnup, Newcastle	10 10 0
James Dale, Esq., Newcastle	10 10 0
Messrs. Joseph Cowen and Co., Newcastle	10 10 0
John Dobson, Esq., Newcastle	10 10 0
J. H. Atkinson, Esq., Newcastle	10 10 0
William Hutt, Esq., M.P., Gibside, Gateshead	10 10 0
W. P. Marshall, Esq., Birmingham	10 10 0
Messrs. Eady and Usher, Hylton Forge, Sunderland	10 10 0
Lord Adolphus Vane Tempest, M.P.	10 10 0
Messrs. H. and J. Barker, Rutherford	10 10 0
William Anderson, Esq., Den House, South Shields	10 10 0
W. H. Budden, Esq., Newcastle	10 10 0
Eight Hon. J. B. Mowbray, M.P., Durham	10 10 0
Mark Elliott, Esq., Houghton-le-Spring	10 10 0
William Marshall, Esq., Westoe, South Shields	10 10 0
James Does, Esq., C.E., Whitehaven	10 10 0
Joseph Fletcher, Esq., C.E., Whitehaven	10 10 0
W. S. Lindsay, Esq., M.P., Tynemouth	10 10 0
Messrs. Clayton, Shuttleworth, and Co., Lincoln	10 10 0
George Forster, Esq., Hexham	10 10 0
George Hunter, Esq., Newcastle	10 10 0
R. Kitchin, Esq., Warrington	10 10 0
James Dunlop, Esq., Newcastle	10 10 0
W. R. Rutson, Esq., Newby Whiske, Thirsk	10 10 0
Nathaniel Plews, Esq., Darlington	10 10 0
Nathaniel Grace, Esq., Newcastle	10 10 0
T. E. Headlam, Esq., M.P., Newcastle	10 10 0
The Vicar of Newcastle	10 10 0
J. T. Thompson, Esq., Newcastle	10 10 0
Robert Ingham, Esq., M.P., South Shields	10 10 0
Lord Lovatine, M.P.	10 10 0
Messrs. Palmer and Allport, Jarrow	10 10 0
John Wales, Esq., Hetton Colliery	10 10 0
Edward Charlton, Esq., M.D., Newcastle	10 10 0
Rev. John Walker, Kirkwhelpington	10 10 0
Francis Johnson, Esq.	10 10 0
Messrs. J. and S. Burrell, Newcastle	10 10 0
Hedworth Lambton, Esq.	10 10 0
J. Cahy, Esq., Midland Great Western Railway of Ireland, Dublin	10 10 0
Alexander Allan, Esq., Perth	10 10 0
G. W. Stable, Esq., Newcastle	10 10 0
Henry Ingledew, Esq., Newcastle	10 10 0
William Kendall, Esq., Blyth and Tyne Railway, Newcastle	10 10 0
Ralph Brown, Esq., Wetherby	10 10 0
S. Wilfrid Haughton, Esq., Dublin	10 10 0
Robert Frazer and Sons, Newcastle	10 10 0
James Gow, Esq., York	10 10 0
John Blenkinsop, Esq., Senhouse	10 10 0
The proprietor of <i>North of England Advertiser</i>	10 10 0
The Sheriff of Newcastle	10 10 0
John Todd, Esq., Newcastle	10 10 0
Herbrand J. Seiner, Esq., Newcastle	10 10 0
C. Berkley, Esq., Marley Hill	10 10 0
The proprietor of the <i>Gateshead Observer</i>	10 10 0
James Clephan, Esq., Gateshead	10 10 0
G. J. Kemmir, Esq., Gateshead	10 10 0
T. M. Greenhow, Esq., M.D., Newcastle	10 10 0
John Elliott, Esq., Newcastle	10 10 0
James Williams, Esq., Sunderland	10 10 0
Mr. John Cai, Newcastle	10 10 0
Mr. T. E. Ward, Newcastle	10 10 0
Messrs. T. E. Ward and Co., Sunderland	10 10 0
Mr. J. S. Mitford, Newcastle	10 10 0
Mr. James Oliver, Newcastle	10 10 0
Mr. John Milburn, Jarrow	10 10 0
Mr. Robert Simpson, Gateshead	10 10 0
Mr. Thomas Scott, Jarrow	10 10 0
Mr. John Armstrong, Sunderland	10 10 0
Mr. Thomas Towns, Newcastle	10 10 0
Mr. George Bailey, Tynemouth	10 10 0
Mr. George Bailey, Newcastle	10 10 0
Mr. Thomas Gray, Newcastle	10 10 0
Mr. E. H. Iyyott, Gateshead	10 10 0
Mr. J. A. Haswell, Gateshead	10 10 0
W. A. Brooks, Esq., Newcastle	10 10 0
Edward Oliver, Esq., Lewes, Sussex	10 10 0
J. Wilson, Esq., Sulston Colliery, Derbyshire	10 10 0
Mr. R. Blaikie, Gateshead	10 10 0
Mr. James Nixon	10 0 0
William Hutchinson, Esq., West Hartlepool	10 0 0
Total	£3762 2 4

The committee, being desirous to proceed as quickly as possible to carry out the resolutions adopted at the public meeting held on the 26th October, respectively invite the gentlemen who propose subscribing to the Stephenson Monument to favour the treasurer or secretaries with their names and the amount of their contributions as early as convenient.

The committee contemplate raising the sum of £5000; and, as soon as the subscriptions reach £4500, a meeting of the subscribers will be convened, to decide on the character of the proposed monument.

TREASURER.—Isaac Lowthian Bell, Esq., Newcastle-on-Tyne.

HONORARY SECRETARIES.—William Kelly, F.S.A.; John A. Haswell, Mem. Inst. M.E.; Literary and Philosophical Society, Westgate-street, Newcastle.

\* Contributions to the fund will be received by the treasurer and secretaries; Charles Mably, Esq., 23, Great George-street, Westminster; W. F. Marshall, Esq., 81, Newhall-street, Birmingham; and at all the banks in Newcastle, Durham, Darlington, Bishop Auckland, Barnard Castle, Northallerton, Thirsk, Yarm, Stockton, Middlesbrough, Hartlepool, West Hartlepool, Scarborough, Sunderland, South Shields, North Shields, Morpeth, Alnwick, Berwick, and Hexham.

INVESTMENTS IN BRITISH MINES.

Full particulars of the most important Dividend and Progressive Mines will be found in the Fourth Edition of

BRITISH MINES CONSIDERED AS AN INVESTMENT.

Recently published, by J. H. MURCHISON, F.G.S., F.S.S.

Mr. Murchison also publishes a QUARTERLY REVIEW OF BRITISH MINING, giving, at the same time, the Position and Prospects of the Mines at the end of each quarter, the Dividends Paid, &c., price 1s. Reliable information and advice will at any time be given by Mr. Murchison, either personally or by letter, at his office, No. 117, Bishopsgate-street Within, London, where copies of the above publications can be obtained.

OPINIONS OF THE PRESS.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal*.

The book will be found extremely valuable.—*Observer*.

A valuable little book.—*Globe*.

A valuable guide to investors.—*Heritage*.

Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unnecessary outlay of capital in mines.—*Mining Herald*.

Of special interest to persons having capital employed, or who may be desirous of investing in mines.—*Mining Chronicle*.

Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—*Leeds Times*.

As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph*.

To those who wish to invest capital in British Mines, this work is of the first importance.—*Welschman*.

This work enables the capitalist to invest on sound principles; it is, in truth, an excellent guide.—*Plymouth Journal*.

Persons desirous to invest their capital in mining speculations will find this work a very useful guide.—*Warrick Advertiser*.

It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—*Sheffield Free Press*.

Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—*Monmouth Beacon*.

Every person connected, or who thinks of connecting himself, with mining speculations should possess himself of this book.—*North Wales Chronicle*.

A very valuable book.—*Cornwall Gazette*.

All who have invested, or intend to invest, in mines should peruse this able work.

We believe a more useful publication, or one more to be depended on, cannot be found.—*Plymouth Herald*.

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald*.

Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express*.

Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner*.

This is really a practical work for the capitalist.—*Stockport Advertiser*.

All who have invested, or intend to invest, in mines, would do well to consult this very useful work.—*Exeter Express*.

### Board of Admiralty, Somerset House.

CONTRACT FOR LIGNUM VITÆ.—THE COMMISSIONERS FOR EXECUTING THE OFFICE OF LORD HIGH ADMIRAL OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND DO HEREBY GIVE NOTICE, that, on Tuesday, the 11th January next, at Two o'clock, they will be READY to TREAT with such persons as may be willing to CONTRACT for SUPPLYING Her Majesty's Dockyard at Portsmouth with SIXTY TONS of ST. DOMINGO LIGNUM VITÆ, of from 6½ to 15½ inches diameter; and TEN TONS of WHITE BAHAMA LIGNUM VITÆ, of from 3½ to 4 inches diameter.

A form of the tender may be seen at the said office. No tender will be received after Two o'clock on the day of Treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Lignum Vitæ," and must be delivered at Somerset-place, accompanied by a letter signed by a responsible person, engaging to become bound with the person tendering, in the sum of £200, for the due performance of the contract.

Department of the Storekeeper General of the Navy, Somerset-place, Dec. 22, 1858.

### East India House.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, THE FINANCE, HOME, AND PUBLIC WORKS COMMITTEE HEREBY GIVE NOTICE, that they will be READY, on or before Friday, the 4th January next, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY IRONMONGERY; and that the conditions of the said contracts (two in number) may be had on application at the secretarial office, where the proposals are to be left any time before Eleven o'clock in the forenoon of the said 4th day of January, 1859, after which hour no tender will be received.

December 21. J. COSMO MELVILL.

### East India House.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, THE FINANCE, HOME, AND PUBLIC WORKS COMMITTEE HEREBY GIVE NOTICE, that they will be READY, on or before Friday, the 4th January next, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY COPPER SHEETS, HOOPS, and BOLTS; and that the conditions of the said contract may be had on application at the secretarial office, where the proposals are to be left any time before Eleven o'clock in the forenoon of the said 4th day of January, 1859, after which hour no tender will be received.

J. COSMO MELVILL.

### FIVE PER CENT. DEBENTURES.—RECIEVE AND SAO FRANCISCO PERNAMBUCO RAILWAY COMPANY (LIMITED).

The DIRECTORS of this company are PREPARED TO RECEIVE TENDERS for LOANS to a limited amount on DEBENTURE BONDS, in sums of £100 and upwards, for periods of not less than three nor more than seven years, at 5 per cent. per annum.

The interest, which will be the first charge on the entire revenue of the company, will be paid half-yearly, by Messrs. Heywood, Kennards, and Co., Lombard-street, London, on presentation of the coupons.

Proposals to be addressed to the secretary, at the offices of the company, Gresham-house, Old Broad-street, London, E.C.

W. H. BELLAMY, Sec.

### COLONIAL BANK.

Subscribed capital £2,000,000. Paid-up capital £500,000.

The COURT OF DIRECTORS of the Colonial Bank HEREBY GIVE NOTICE, that, in pursuance of the provisions of the Charter, a HALF-YEARLY GENERAL MEETING of the proprietors will be HELD at the London Tavern, Bishopsgate-street Within, on WEDNESDAY, 5th January, 1859, at Twelve o'clock precisely, to receive the report of the proceedings of the Corporation, and for the election of five directors and one auditor, in the room of the following gentlemen, who go out by rotation, viz.:—

Thomas Naughten, Esq.; William Tettibill, Esq.; Charles Metcalf, Esq.; Sir Walter Minto Townsend Farquhar, Bart., M.P.; Eden, Auditor.

And who being eligible offer themselves for re-election. The transfer books of the corporation will be closed on the 23rd inst., and re-opened on the 20th January, 1859.

By order of the Court of Directors, C. A. CALVERT, Sec.

13, Bishopsgate-street Within, December 13, 1858.

Directors.

And who being eligible offer themselves for re-election. The transfer books of the corporation will be closed on the 23rd inst., and re-opened on the 20th January, 1859.

By order of the Court of Directors, C. A. CALVERT, Sec.

13, Bishopsgate-street Within, December 13, 1858.

### THE SHAREHOLDERS OF THE COMPANY OF PROPRIETORS OF THE ROYAL CONSOLIDATED COPPER MINES OF SAN FERNANDO, CUBA (LIMITED).

Notice is hereby given, that, at an EXTRA-ORDINARY GENERAL MEETING of the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), held at the London Tavern, Bishopsgate-street, on Monday, the 29th day of November, 1858, the following resolutions were passed, namely:—

That the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited) be wound-up voluntarily.

That Cunyngham Borthwick, Esq.; Thomas Close, Esq.; Walter Shairp, Esq.; and William Dallyson Starling, Esq., be the liquidators for the purpose of winding-up the affairs of the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), and distributing the property thereof.

And notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the said Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), will be HELD at the London Tavern, Bishopsgate-street, on Monday, the 10th day of January, 1859, at Two o'clock in the afternoon precisely, for the purpose of confirming such resolutions respectively; and at which last-mentioned Extraordinary General Meeting it is intended to propose a resolution for the confirmation of the above-mentioned resolutions, and for the appointment of the said Cunyngham Borthwick, Thomas Close, Walter Shairp, and Wm. Dallyson Starling as liquidators, in the terms thereof.</p

**MORE STEAM, LESS FUEL, NO SMOKE.**  
S.S. "Tessing," Victoria (London) Docks, Dec. 14, 1858.  
Sir.—Since I wrote to you on the 11th September, we have made fifteen voyages to and from Toulon with your PATENT REGULATING AIR DOORS, and with the same satisfactory results in *increase of steam* (20 per cent.), *saving of fuel* (15 per cent.), and *reduction of smoke*. We have never (as we used to have) any flame in the funnel, and the ventilation of the stoking room is so good that the firemen work with comfort in the hottest weather. The doors are as perfect as when first fitted.

To Mr. J. Lee Stevens, 1, Fish-street-Hill, E.C.  
N.B.—The profit on 16 voyages, besides paying for the doors, exceeds £100.

**OVERLAND ROUTE.—WEEKLY COMMUNICATION BY STEAM TO INDIA, &c., VIA EGYPT.**  
THE PENSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS AND RECEIVE GOODS AND PARCELS for the MEDITERRANEAN, EGYPT, ADEN, CEYLON, MADRAS, CALCUTTA, the STRAITS, CHINA, and JAPAN, by their steamers leaving Southampton on the 4th and 20th of every month; and for the MEDITERRANEAN, EGYPT, ADEN, and BOMBAY, by their packets leaving Southampton about the 11th and 27th of the month. For further particulars, apply at the company's offices, No. 122, Leadenhall-street; and general place, Southampton.

STEAM TO AUSTRALIA UNDER SIXTY DAYS.  
PASSAGE MONEY £44 AND UPWARDS.

**LACK BALL LINE OF BRITISH AND AUSTRALIAN EX-ROYAL MAIL PACKETS AND EAGLE LINE.**  
In conjunction with the celebrated auxiliary steam clippers GREAT BRITAIN and ROYAL CHARTER.  
Appointed to sail punctually from LIVERPOOL on the 6th and 15th of each Month.

The above, in addition to being the only line with steamers out of Liverpool, is composed of the LARGEST, FINEST, and FASTEST MERCHANT SHIPS in the WORLD. Ship. Register. Burthen. Captain. Date.

LIGHTNING ..... 2090 ..... 4500 ..... CLARKE ..... 5th January.  
ROWENA ..... 1166 ..... 3000 ..... WILSON ..... 15th January.  
MARCO POLO ..... 1625 ..... 3500 ..... JOHNSTON ..... 5th February.

GREAT BRITAIN. OCEAN CHIEF.  
ROYAL CHARTER. INDIAN QUEEN.  
LIGHTNING. BRITISH TRIDENT.  
CHAMPION OF THE SEAS. GIPSEY BRIDE.  
DONALD MCKAY. GREAT TASMANIA.  
MARCO POLO. COMMODORE PERRY.  
EAGLE. METEOR.

The above celebrated steam and sailing clipper ships, forming the only lines honoured visit from Her Majesty the Queen, and so well known for their rapid passages, punctuality in sailing, and splendid accommodation unsurpassed by any ships in the world, continue to sail regularly between Liverpool and Melbourne, thus affording to passengers and shippers the most unrivalled advantages. The commanders are men of experience, and noted for their kindness and attention to passengers.

The cabin accommodation is most superior, the saloons being elegantly furnished with every regard to ensure comfort to passengers, and are supplied with beds, bedding, &c., apply to GIBBS, BRIGHT, and Co., or to JAMES BAINES and Co., Liverpool; or to T. M. MACKAY and Co., 2, Moorgate-street, London, E.C.

NOTICE.—The WHITE STAR clippers, comprising the LARGEST, FINEST, and FASTEST CLIPPERS in the WORLD, will be dispatched punctually at noon of the 1st 12th of every month.

**WHITE STAR LINE OF BRITISH AND AUSTRALIAN EX-ROYAL MAIL PACKETS.**

SAILING FROM LIVERPOOL TO MELBOURNE, on the 1st and 20th of every month, and from MELBOURNE TO LIVERPOOL, on the 1st of every month.

Passengers forwarded by steamers to ALL PARTS OF AUSTRALIA, TASMANIA, &c., at through rates.

ED JACKET ..... M. H. O'HALOURN WHITE STAR ..... T. C. KERR.  
GENE OF THE SEAS H. A. BROWN STAR OF THE EAST ..... GAGE.  
CLERKE. CLARKE. J. R. BROWN.  
EMMA ..... JAMES WHITE. ARABIAN ..... M. GANDY.  
EUCHWORTH ..... THOMAS FRAN. SHROCCO ..... J. FLOOD.  
CLOSE ..... GEORGE KERR. SULTANA ..... BREWSTER.

And other celebrated clippers.

Ship. Register. Burthen. Captain. Date.

PRINCE OF THE SEAS ..... 1427 ..... 4500 ..... H. A. BROWN ..... January 20.  
BLUE JACKET ..... 1042 ..... 3500\* ..... J. CLARKE ..... February 1.

ARABIAN ..... 1108 ..... 3500\* ..... M. GANDY ..... February 20.

Passenger embark on the 19th and 31st January.

Packet of the 29th January, the very magnificent clipper *Prince of the Seas*, 1427 tons register, 4500 tons burthen, Capt. H. A. Brown.

The *Prince of the Seas* is one of the largest, handsomest, and fastest clippers afloat; designed expressly for the Australian passenger trade, and is complete in every detail for the general comfort of all her passengers. She has saloon, highly laden, extraordinary distance of 392 knots, or 451 statute miles, in one day, a rate of speed

giving some of the fastest clippers afloat. Her saloons are sumptuously furnished, supplied with bedding, linen, piano, library, chess boards, &c., the ship also carries all for the use of saloon passengers. Her second cabin are in front of the poop, and up in an elegant and superior manner, whilst the between decks are extensive, and thoroughly lighted and ventilated.

For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool.

**WHITE STAR LINE OF BRITISH AND AUSTRALIAN EX-ROYAL MAIL PACKETS.**

SAILING BETWEEN LIVERPOOL AND MELBOURNE, on the 1st and 20th of every month, and forwarding passengers by steamers at through rates to ALL PARTS OF AUSTRALIA.

Packet of the 1st of February, the beautiful new clipper ship, *Blue Jacket*, Capt. Clarke, 12 tons register, 3500 tons burthen.

This elegant clipper is sister ship to the celebrated clippers *Moorsfoot*, *Genii*, and *W. F. Williams* (which made her last passage home from Australia in 67 days), and is built expressly for this trade. Like her companion ship, the *Red Jacket*, she is of exquisite symmetry, her lines are remarkably sharp, and she is expected to prove one of the fastest clippers in the world. Her main saloon is a magnificent apartment, fitted with great splendour, and replete with every appliance for the luxurious enjoyment of the voyage. A piano, library, linen, bedding, chess boards, &c., are provided for the passengers, for whom a cow is also carried. The accommodations for second class, intermediate, and steerage passengers cannot be surpassed.

For freight or passage, apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool.

**A USTRALIA AND THE NEW GOLD DIGGINGS.—THROUGH PASSAGE TO FITZROY RIVER AND MORETON BAY, BY THE MERSEY LINE OF PACKETS, SAILING FROM LIVERPOOL TO MELBOURNE, on the 25th of every month. The magnificent clipper, *Captain Cook*, 2500 tons burthen, is the packet of the 25th February. She has been in Her Majesty's transport service the last two years, having a specially selected on account of her extraordinary speed, which justifies the expectation that she will make the passage out under 70 days. Her second cabin in poop is quite "dry" by any ship on the berth, and the chief cabin is elegantly furnished.—Apply EDWARD WILSON and Co., 20, Water-street, Liverpool; or to their agent, ANDREW KEGAN, 26, Leadenhall-street, London, E.C.**

**MAPPIN'S ELECTRO-SILVER PLATE & TABLE CUTLERY.**

—MAPPIN BROTHERS (Manufacturers by Special Appointment to the Queen) are the only Sheffield makers who supply the consumer in London. Their London Show-rooms, 67 and 68, KING WILLIAM STREET, LONDON BRIDGE, contain by far the LARGEST STOCK OF ELECTRO-SILVER PLATE AND TABLE CUTLERY in the world, which, when manufactured direct from their factory, QUEEN'S CUTLERY WORKS, SHEFFIELD.

Eddie Pat., Double Thread, King's Pat., Lily Pat.,

Tea Spoons, best quality ..... £ 1 16 0 ..... £ 2 14 0 ..... £ 3 0 0 ..... £ 3 12 0

Tea Forks, best quality ..... 1 16 0 ..... 2 14 0 ..... 3 0 0 ..... 3 12 0

Dessert Spoons, best quality ..... 1 7 0 ..... 2 0 0 ..... 2 4 0 ..... 2 14 0

Tea Spoons, best quality ..... 1 7 0 ..... 2 0 0 ..... 2 4 0 ..... 2 14 0

Dessert Spoons, best quality ..... 1 4 0 ..... 1 7 0 ..... 2 0 0 ..... 2 14 0

Ladies' Spoons, best quality ..... 0 8 0 ..... 0 10 0 ..... 0 11 0 ..... 0 13 0

Ivory Spoons (gift boxes), best quality ..... 0 7 0 ..... 0 10 0 ..... 0 11 0 ..... 0 13 0

Tea Spoons (gift boxes), best quality ..... 0 6 0 ..... 0 10 0 ..... 0 12 0 ..... 0 14 0

Mustard Spoons, best quality ..... 0 1 8 ..... 0 2 6 ..... 0 3 0 ..... 0 3 6

Tea Spoons, best quality ..... 0 3 6 ..... 0 5 6 ..... 0 6 0 ..... 0 7 0

Fish Carvers, best quality ..... 1 0 0 ..... 1 10 0 ..... 1 14 0 ..... 1 18 0

Butter Knife, best quality ..... 0 3 0 ..... 0 5 0 ..... 0 6 0 ..... 0 7 0

Tea Spoons, best quality ..... 0 12 0 ..... 0 16 0 ..... 0 17 6 ..... 1 0 0

Tea Spoons (gilt), best quality ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 ..... £21 4 0

Any article can be had separately at the same prices.

Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dishes (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glasses), 24s.; Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with pieces attached, sent per post on receipt of 12 stamps.

Ordn. quan. Medium quan. Best quan.

Dozen Full Size Table Knives, Ivory Handles ..... £2 4 0 ..... £1 16 0

Dozen Full Size Cheese ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Regular Meat Carvers ..... 0 8 6 ..... 0 12 0 ..... 0 16 6

Pair Extra Sized ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Poultry Carvers ..... 0 3 0 ..... 0 4 0 ..... 0 6 0

Steel for Sharpening ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 ..... £21 4 0

Any article can be had separately at the same prices.

Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dishes (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glasses), 24s.; Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with pieces attached, sent per post on receipt of 12 stamps.

Ordn. quan. Medium quan. Best quan.

Dozen Full Size Table Knives, Ivory Handles ..... £2 4 0 ..... £1 16 0

Dozen Full Size Cheese ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Regular Meat Carvers ..... 0 8 6 ..... 0 12 0 ..... 0 16 6

Pair Extra Sized ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Poultry Carvers ..... 0 3 0 ..... 0 4 0 ..... 0 6 0

Steel for Sharpening ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 ..... £21 4 0

Any article can be had separately at the same prices.

Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dishes (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glasses), 24s.; Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with pieces attached, sent per post on receipt of 12 stamps.

Ordn. quan. Medium quan. Best quan.

Dozen Full Size Table Knives, Ivory Handles ..... £2 4 0 ..... £1 16 0

Dozen Full Size Cheese ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Regular Meat Carvers ..... 0 8 6 ..... 0 12 0 ..... 0 16 6

Pair Extra Sized ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Poultry Carvers ..... 0 3 0 ..... 0 4 0 ..... 0 6 0

Steel for Sharpening ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 ..... £21 4 0

Any article can be had separately at the same prices.

Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dishes (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glasses), 24s.; Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with pieces attached, sent per post on receipt of 12 stamps.

Ordn. quan. Medium quan. Best quan.

Dozen Full Size Table Knives, Ivory Handles ..... £2 4 0 ..... £1 16 0

Dozen Full Size Cheese ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Regular Meat Carvers ..... 0 8 6 ..... 0 12 0 ..... 0 16 6

Pair Extra Sized ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Poultry Carvers ..... 0 3 0 ..... 0 4 0 ..... 0 6 0

Steel for Sharpening ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 ..... £21 4 0

Any article can be had separately at the same prices.

Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dishes (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glasses), 24s.; Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with pieces attached, sent per post on receipt of 12 stamps.

Ordn. quan. Medium quan. Best quan.

Dozen Full Size Table Knives, Ivory Handles ..... £2 4 0 ..... £1 16 0

Dozen Full Size Cheese ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Regular Meat Carvers ..... 0 8 6 ..... 0 12 0 ..... 0 16 6

Pair Extra Sized ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Poultry Carvers ..... 0 3 0 ..... 0 4 0 ..... 0 6 0

Steel for Sharpening ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 ..... £21 4 0

Any article can be had separately at the same prices.

Set of Four Corner Dishes (forming eight dishes), £8 8s.; One Set of Four Dishes (one 20 in., one 18 in., and two 14 in.), £10 10s.; Cruet Frame (four glasses), 24s.; Size Tea and Coffee Service, £9 10s. A Costly Book of Engravings, with pieces attached, sent per post on receipt of 12 stamps.

Ordn. quan. Medium quan. Best quan.

Dozen Full Size Table Knives, Ivory Handles ..... £2 4 0 ..... £1 16 0

Dozen Full Size Cheese ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Regular Meat Carvers ..... 0 8 6 ..... 0 12 0 ..... 0 16 6

Pair Extra Sized ditto ..... 0 7 6 ..... 0 11 0 ..... 0 15 6

Pair Poultry Carvers ..... 0 3 0 ..... 0 4 0 ..... 0 6 0

Steel for Sharpening ..... 0 10 0 ..... 0 15 0 ..... 0 18 0 ..... 1 1 0

Complete Service ..... £10 13 0 ..... £15 16 6 ..... £17 13 6 .....

## THE MINING SHARE LIST.

## DIVIDEND MINES.

<i>Sharees.</i>	<i>Mines.</i>	<i>Paid.</i>	<i>Nom.</i>	<i>Pr.</i>	<i>Business.</i>	<i>Dividends per Share.</i>	<i>Last Paid.</i>
5130 Alfred Consols (cop.), Philiskirk [S.E.]	2 11 10	8½	8 8½	..	19	5 6..	0 2 Oct.
16000 Bampfylde (copper), Devon	0 12 6..	4	..	..	0	0 7½..	0 6 7½ May.
4000 Redford United (copper), Tavistock	2 8 6..	6½	6½ 6½	..	10	6 6..	0 3 Dec.
4928 Boscan (tin), St. Just	20 10 0..	57½	..	..	23	0 0..	1 0 Nov.
2000 Botallack (tin, copper), St. Just	91 0..	205	..	..	426	10 0..	2 10 Oct.
4995 Calstock Consols (copper)	5 0 0..	4½	4 4½	..	0	2 6..	0 3 Dec.
16000 Carr Brea (copper, tin), Illogan	15 0..	62½	67½ 72½	..	243	10 0..	3 0 Aug.
2000 Cefn Cwm Brynwyd (lead), Cardiganshire	33 0..	37	..	..	5	0 0..	2 0 Mar.
2000 Collacomeore (copper), Llanerchaeron	5 0..	12	..	..	2	5 0..	0 8 Dec.
12000 Copper Miners England	25 0..	26	..	..	..	..	..
360000 Ditto (stock)	100 0..	25	..	..	7½ per cent.	..	Half-yearly.
1655 Cradock Moor (copper), St. Cleer	8 0..	30	..	29 31	2	4 0..	0 5 Nov.
1677 Cwm Erin (lead), Cardiganshire	7 10 0..	14	..	..	0	10 0..	0 10 Nov.
125 Cwmyntith (lead), Cardiganshire	60 0..	300	..	..	145	0 0..	5 0 Sept.
4076 Devon and Cornwall (copper)	4 8 3..	9	..	12 14	0	5 6..	0 2 April.
1024 Devon Gt. Con. (cop.), Tavist. [S.E.]	0 9 0..	460	..	455 460	639	0 0..	7 0 Nov.
358 Dolcoath (copper, tin), Camborne	128 17 6..	200	..	..	492	10 0..	5 0 Dec.
300 East Daren (lead), Cardiganshire	32 0..	110	..	105 110	54	0 0..	3 0 Dec.
2045 East Falmouth (copper), Gwennap	2 0 0..	3	..	..	0	7 6..	0 2 Jan.
125 East Pool (tin, copper), Pool, Illogan	24 5..	175	..	..	305	0 0..	2 10 Aug.
5700 Exmouth (silver-lead), Christow	4 14 0..	8	..	..	3 15	0 0..	2 6 April.
1400 Eyan Mining Co. (lead), Derbyshire	5 0 0..	38	..	..	18 15	1 4..	1 0 Aug.
243 Granberry and St. Aubyn (cop.) [S.E.]	109 19 0..	135	..	142½ 147½	17	0 0..	3 0 Nov.
6000 Great South Tolgus [S.E.]	14 6..	13½	..	13½ 13½	3	7 6..	0 10 Dec.
1024 Herdstone (lead), near Liskeard	8 10 0..	7	..	7 7½	4	7 6..	0 12 June.
2560 Isle of Man, Limited (lead)	25 0..	42	..	..	58	8 3..	1 9 June.
160 Levant (copper, tin), St. Just	2 10 0..	105	..	..	1076	0 0..	5 0 Nov.
4000 Llansbury (lead), Cardiganshire, Wales	18 5..	100	..	..	317	10 0..	2 0 Dec.
5000 Mendip Hills (lead), Somerset	3 15 0..	13	..	..	1	13 6..	0 6 May.
1800 Minera Mining Co., Ltd. (Old), Wrexham	25 0..	110xd.	..	..	35	12 6..	2 10 Nov.
30000 Mining Co. of Ireland (cop., lead, coal)	7 0 0..	134	..	131 135	13	13 4..	0 5 7 July.
470 Newtownards Mining Co., Co. Down	50 0..	35	..	..	55	0 0..	1 0 July.
6100 N. W. Bassett (cop., tin), Illogan [S.E.]	nil	9	..	8 8½	14	12 0..	0 8 Aug.
649 Far Consols (cop.), St. Blazey [S.E.]	1 2 6..	17	..	15 16	32	15 0..	0 10 Oct.
2000 Phoenix (copper, tin), Linkinhorne	100 0..	410	..	490 410	294	10 0..	25 0 Nov.
1900 Polberro (tin), St. Agnes (Preferential)	15 0..	5	..	..	18 11	9..	1 3 July.
1772 ditto (Old and ditto)	..	5	..	..	1	7 0..	0 7 Sept.
560 Providence (tin), Uny Lelant [S.E.]	20 13 2..	64	..	61 63	79	4 6..	3 0 Nov.
2500 Rhosydol and Bachdeion (lead)	11 5 0..	12	..	..	6 15	0..	0 3 0 July.
15000 Ruadean Colliery Company, Limited	5 0 0..	34	..	..	0	1 10½	0 1 Aug.
256 South Cardon (cop.), St. Cleer [S.E.]	2 10 0..	410	..	400 410	546	0 0..	8 0 Nov.
256 South Gartons	26 0..	70	..	..	2	0 0..	2 0 Nov.
512 South Tolgus (cop.), Redruth, Cornwall	8 0 0..	80	..	77½ 80	79	10 0..	2 0 Nov.
496 South Wheal Frances, Illogan [S.E.]	18 18 9..	235	..	230 235	310	5..	0 5 Nov.
20000 St. Day United (tin and copper)	2 8 0..	129	..	118 128	0	3 6..	0 1 Feb.
470 St. Ives Consols (tin), St. Ives	16 0..	37½	..	35 37½	920	0 0..	2 10 Nov.
6000 Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0..	33½	..	31½ 35½	8	18 6..	0 5 30 Sept.
20000 Vale of Towy (lead), Carmarthen [S.E.]	0 12 6..	13	..	12½ 13	0	5 9..	0 1 10 July.
512 Wendron Consols (tin), Wendron	23 7..	43	..	..	3	0 0..	1 0 Sept.
6000 West Bassett (copper), Illogan [S.E.]	1 10 0..	23	..	21 22	15	3 0..	2 0 Nov.
256 West Cardon (cop.), Liskeard [S.E.]	20 0..	135	..	135 140	287	5 0..	2 0 May.
2000 West Fowey Consols (tin and copper)	7 0 0..	6½	..	..	0	2 6..	0 2 Mar.
4000 West Wheal Seton (cop.), Camborne	38 10 0..	295	..	290 295	146	0 0..	7 0 Dec.
240 Wheal Boal (tin), St. Just	15 0..	18	..	..	3	0 0..	10 Nov.
512 Wheal Bassett (copper), Illogan [S.E.]	5 9 6..	215	..	210 220 d.	507	10 0..	6 0 Dec.
256 Wheal Butler (cop.), Redruth [S.E.]	0 5 0..	180	..	..	395	0 0..	5 0 Nov.
4096 Wheal Edward (cop.), Calstock [S.E.]	5 10 0..	3	..	2½	..	0 5 0..	0 5 Mar.
128 Wheal Friendship (copper), Devon	50 0..	90	..	..	2385	10 0..	30 0 Feb.
448 Wh. Mar. Lelant (tin), Uny Lelant [S.E.]	19 15 0..	62½	..	63 65	93	10 0..	3 10 Nov.
1024 Wh. Mar. Ann (id.), Menheniot [S.E.]	8 0 0..	46½	..	44 45	167	6..	2 5 Dec.
80 Wheal Owles, St. Just, Cornwall	70 0..	300	..	..	225	13 0..	5 0 Aug.
160 Wh. Trelewain (s.d.), Liskeard [S.E.]	4 10 0..	29½	..	29 30	34	10 0..	1 0 Oct.
4096 Wheal Wrey (lead), St. Ives	1 14 0..	24½	..	23½ 23½	2	12 6..	0 2 Dec.
5000 Wicklow (copper), Wicklow	5 0 0..	38½	..	38½	30	5 6..	1 10 July.

#### MINES WITH DIVIDENDS IN ABEYANCE.

1624	Ballewden (tin), St. Just	11	5 0 ..	5 ..	..	12	5 0 ..	5 0 ..	Jan.	1854	
1626	Brightside & Frogatt Grove, Derbysh.	3	0 0 ..	3½ ..	..	3	0 0 ..	3 0 ..	April	1856	
160	Bryndaf Hall (lead), Flintshire	25	0 0 ..	50 ..	..	13	0 0 ..	5 0 ..	July	1856	
1600	Bryntal, Llanidloes, Montgomeryshire	8	5 0 ..	11½ ..	10½ ..	11½ ..	0 5 0 ..	0 5 0 ..	July	1856	
390	Budnick Consols (tin), Perran	2	2 6 ..	7 ..	6½ ..	7 ..	0 10 0 ..	0 10 0 ..	Mar.	1857	
6800	Bwlch (silver-lead), Cardiganshire	3	6 6 ..	1½ ..	..	0 2 6 ..	0 2 6 ..	Aug.	1856		
2348	Carnorth (tin), St. Just	4	15 0 ..	4½ ..	4 4½ ..	..	0 15 0 ..	0 15 0 ..	June	1856	
256	Condurrow (cop., tin), Camborne	20	0 0 ..	55 ..	60 70 ..	..	0 20 0 ..	0 20 0 ..	June	1857	
30000	Craven Moor, Limited (lead), Yorkshire	0 10 0 ..	3 ..	..	..	0 0 ..	0 0 ..	9 ..	Feb.	1856	
282	Derwent Mines (sil.-lead), Durham	.300	0 0 ..	150 ..	..	122	0 0 10 ..	0 0 ..	June	1857	
672	Ding Dong (tin), Guylav	35	0 0 ..	8½ ..	7½ ..	8 ..	16	7 6 ..	1 10 ..	Mar.	1857
12800	Druke Walls (tin, copper), Calstock	2	1 0 ..	1½ ..	18 ..	208 ..	0 13 6 ..	0 2 0 ..	Sept.	1857	
1024	East Wheal Margaret (tin, copper)	7	17 6 ..	2 ..	13 ..	21 ..	0 5 ..	0 5 ..	July	1854	
4940	Fowey Consols (copper), Tywardreath	4	0 0 ..	3½ ..	..	..	41	4 3 ..	0 6 ..	Sept.	1854
4448	General Mining Co. for Irel. (cop., id.)	4	0 0 ..	1½ ..	1½ ..	..	1	0 8 ..	0 3 ..	June	1853
2600	Goginan (silver-lead), Cardiganshire	12	5 0 ..	2½ ..	..	..	22	0 0 ..	0 5 0 ..	Sept.	1850
1024	Gonamore (copper), St. Cleer	14	5 0 ..	8½ ..	7½ ..	8 ..	0	7 6 ..	0 7 5 ..	Dec.	1852
26666	Gl. Wh. Vor (tin, cop.), Helston [S.E.]	8	17 6 ..	3 ..	1½ ..	5 ..	0 5 ..	0 5 0 ..	Oct.	1855	
119	Great Wheal (tin), Germoe ..	100	0 0 ..	110 ..	..	..	231	10 0 ..	7 10 ..	Feb.	1857
6000	Hington Down Cons. (cop.), Calstock	3	15 0 ..	35 ..	35 ..	..	2	16 0 ..	0 2 6 ..	Nov.	1856
2000	Holycross (copper), near Tipperary ..	11	0 0 ..	8½ ..	..	..	4	2 6 ..	0 5 0 ..	Jan.	1857
20	Laxey Mining Company, Isle of Man	100	0 0 ..	1,000 ..	..	..	1420	0 0 50 ..	0 0 ..	June	1857
5000	Levish Mines (tin, copper), St. Erth ..	6	9 11 ..	2½ ..	2 2½ ..	..	0	10 0 ..	0 10 0 ..	Dec.	1855
4000	Marke Valley (copper), Caradon ..	4	10 6 ..	2½ ..	2½ ..	1½ ..	0	5 6 ..	0 3 0 ..	Sept.	1855
5000	Merlyn (lead), Flint ..	3	0 0 ..	12 ..	12 ..	3 ..	0	11 0 ..	0 2 6 ..	June	1853
5000	Nanteos & Penrhyl, Llan. (42½ sha.)	2	5 0 ..	1½ ..	1½ ..	1½ ..	0	1 6 ..	0 1 6 ..	April	1855
200	North Pool (copper, tin), Pool ..	40	18 0 ..	5½ ..	..	..	324	0 0 ..	2 0 0 ..	Dec.	1854
700	North Rockwear (copper), Camborne ..	13	0 0 ..	22 ..	21½ ..	22 ..	750	0 0 ..	4 0 0 ..	Sept.	1853
512	Rosewarne United (cop., tin), Gwincar* ..	15	0 0 ..	20 ..	20 ..	25 ..	32	10 0 ..	1 10 0 ..	June	1857
12000	Sertridge Con. (cop.), Whitchurch [S.E.]	0	6 0 ..	16s ..	14s. 15s ..	..	0	10 0 ..	0 2 6 ..	July	1857
18	South Crimis (copper), St. Austell ..	19	0 0 ..	285 ..	..	..	60	0 0 ..	20 0 ..	June	1855
794	Spearne Con. (tin), St. Just, Cornwall	3 18 0 ..	..	7½ ..	7½ ..	..	8	8 6 ..	0 2 6 ..	Dec.	1853
280	Spearne Moor (copper), St. Just ..	23	7 8 ..	15 ..	..	..	4	5 0 ..	0 10 0 ..	June	1856
970	St. Aubyn and Grylls (cop., tin), Breage ..	6	4 0 ..	2½ ..	3 ..	..	0	17 6 ..	0 7 3 ..	April	1852
9600	Tamar Con. (sil.-id.), Beerenstall [S.E.]	4	10 0 ..	1½ ..	20s ..	22s ..	4	13 6 ..	0 2 6 ..	Feb.	1856
572	Trellyn Consols (tin), St. Ives ..	11	10 0 ..	9½ ..	4½ ..	4½ ..	1	15 0 ..	1 0 0 ..	Feb.	1854
120	Trehewa (cop.), Gwennap, Cornwall	15	10 0 ..	15 ..	..	..	405	13 6 ..	2 19 0 ..	April	1851
4096	Treweatha (sil.-id.), Menheniot, Cornwall ..	2	18 0 ..	3 ..	3 ..	..	1	12 0 ..	0 3 0 ..	April	1857
100	Trumpet Consols (tin), near Heiston ..	95	0 0 ..	11 ..	..	..	45	0 0 ..	5 0 0 ..	Dec.	1854
400	United Mines (copper), Gwennap ..	40	0 0 ..	120 ..	122½	127½ ..	61	5 6 ..	0 2 0 ..	Feb.	1856
512	West Damself (copper), Gwennap ..	12	17 0 ..	11 ..	..	..	22	0 0 ..	2 0 0 ..	July	1857
1024	West Providence (tin), St. Erth ..	2	11 7 ..	1 ..	1½ ..	..	33	1 9 ..	0 10 0 ..	April	1857
6140	Wheatle Arthur (copper), Calstock ..	2	10 0 ..	3 ..	14s. 15s ..	..	1	8 6 ..	0 0 0 ..	Oct.	1855
1024	Wheatle Charlotte, Perranuthnoe ..	5	3 4 ..	20 ..	18 ..	29 ..	1	10 0 ..	0 10 0 ..	Sept.	1855
250	Wheatle Clifford (copper), Gwennap ..	..	310 ..	..	..	..	42	0 0 ..	3 0 0 ..	Oct.	1857
512	Wheatle Jane (silver-lead), Ken ..	3	10 0 ..	25 ..	..	..	8	10 0 ..	1 10 0 ..	Oct.	1857
5000	Wheatle Kitty (tin), St. Arnes ..	4	10 0 ..	3½ ..	3½ ..	4 ..	0	6 0 ..	0 3 0 ..	Mar.	1857
1024	Wheatle Kitty (tin), Uny Lelant [S.E.]	1	7 2 ..	9 ..	8½ ..	9 ..	6	0 0 ..	1 0 0 ..	Sept.	1857
430	Wheatle Lovel (tin), Wendron ..	33	0 0 ..	7 ..	..	..	31	0 0 ..	1 0 0 ..	Sept.	1856
100	Wheatle Mary (tin) Lelant ..	36	0 0 ..	230 ..	..	..	248	5 10 ..	0 5 0 ..	Mar.	1858
240	Wheatle Reeth (tin), Uny Lelant ..	39	10 0 ..	22½ ..	20 ..	21 ..	40	10 0 ..	3 0 0 ..	Aug.	1852
198	Wheatle Seton (tin, copper), Camborne* ..	107	0 0 ..	130 ..	..	..	286	10 0 ..	2 0 0 ..	Oct.	1857
1024	Wheatle Tremayne (tin, cop.), Gwincar ..	12	2 6 ..	2½ ..	..	..	10	2 6 ..	0 7 6 ..	Jan.	1854

[\* Dividends paid every two months. † Dividends paid every three months.]

## FOREIGN MINES.

## MINES WITH DIVIDENDS IN ARREAR

10000	Alten & Quisenberry Unit (cop.)	Nor. 16	10 0 ..	3 ..	3 ..	4 5 0 ..	0 15 0 ..	Nov. 1863
88676	North British Australasian [S.E.]	1	0 0 ..	.. %	.. %	0 3 11 ..	1 0 3 ..	Feb. 1867
10000	Fontgibaud (sulf.-lead), France	S.E. 20	0 0 ..	5% ..	4% ..	1 0 0 ..	1 0 0 ..	June 1865
7000	Royal Santiago (copper), Cuba	[S.E.] 16	15 0 ..	1 1/2 ..	1 1/2 ..	33 0 0 ..	1 0 5 ..	July 1848
11000	St. John del Rey [L.], Brazil [S.E.]	15	0 0 ..	.. 11 ..	.. 13 ..	35 7 6 ..	1 0 0 ..	June 1867
43174	Unit Mexican [S.E.] Mexico	Av. 28	0 0 ..	3% ..	2% ..	1 16 6 ..	0 4 0 ..	Feb. 1863

## NON-DIVIDEND FOREIGN MINES.

<i>Shares.</i>	<i>Mines.</i>	<i>Paid.</i>	<i>Nom. Fr.</i>	<i>Bus. done.</i>	<i>Last Call.</i>
20000	Acadian Charcoal Iron, Nova Scotia [L.]	8 10 0	6	—	Nov. 1858
20000	Australian (copper) [S. E.]	7 5 0	—	—	
75000	Bon Accord, South Australia (copper) [L.] [S.E.]	0 10 0	—	—	
10000	Brazilian Imperial [S.E.]	27 5 0	2	1 1/2	
10000	Brazilian Land and Mining, Alotapeque [L.] [S.E.]	5 0 0	2 1/4	13 2 1/4	
6000	Central American (silver) [L.]	7 0 0	2 1/2	—	April, 1858
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 12 6	—	—	Oct. 1857
83040	Cologne Mining Company (lead), Rhineish Prussia	1 4 0	—	—	June, 1856
10000	Coprate Smelting [L.]	10 0 0	13	—	
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	
15000	East Indian Coal, Calcutta [L.]	10 0 0	10	—	
20000	Elderslie and Bardowie, Jamaica	0 16 0	1 1/2	—	
8000	English and Canadian Mining Company Limited, Quebec	3 15 0	—	—	
2000	English Ridge (copper), Newfoundland [L.]	0 10 0	5	—	
25000	Fortuna (lead), Spain [S.E.]	2 0 0	1 1/2	1 1/2	July, 1856
10000	Great Barrier Land, Mining, &c., New Zealand	1 lu 0	1 1/2	—	
2300	Kluzigthal Mining Association, Germ. A.	4 0 0	—	—	
5000	Mount Carbon (coal), Virginia	1 0 0	—	—	
4000	New Granda (gold) [S.E.]	1 0 0	—	—	
10000	New Grand Duchy of Baden (silver-lead)	0 15 0	2 3	—	Nov. 1858
50000	Newfoundland Mining Association [L.]	0 2 0	—	—	
80000	North Rhine Copper of South Australia, Limited [S.E.]	0 10 0	—	—	
200000	Nouveau Monde (copper)	1 0 0	—	—	
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	—	—	
80000	Quartz Reduction [L.]	1 0 0	—	—	
6000	Bonnie and Canada (lead)	9 0 0	—	—	Nov. 1858
55415	Strathalbyn (copper) [L.]	1 0 0	—	—	
2000	Turk's Head (copper), Newfoundland [L.]	0 10 0	5	—	
25000	Victor Emanuel Val d'Osma, Piedmont [L.]	1 0 0	1	1	

## PROGRESSIVE MINES.

Area.	Mines.	Paid.	No. Pr.	Bus. done.	Last Call.
5000 Abbey Consols (ld.), Cardigan.	1 8 6.	1.		Nov. 1858	
5000 Abergarnock (copper), Phillip.	1 0 0.	1/4.			
5000 Antron Consols (cp.), St. Eirth.	9 7 3.	8.			
5000 Ashton United (cp., tin).	6 0 0.	6/4.	6 6/4.		
5000 Ballymenone.	2 0 0.	—.			
5000 Ballyving (lead) [L.]	4 5 0.	2/4.			
5000 Barf (lead), Kewick.	1 5 0.	3.	2 3/4.	3.	
5024 Basset Consols, Illogan.	1 10 0.	1.			
5000 Bedford Consols (copper).	1 5 0.	1.			
5000 Bell and Lamart, Gwennap.	17 15 0.	4/4.	4 4/4.	Sept. 1858	
5000 Berehaven (copper), Ireland.	1 0 0.	1/4.			
5000 Berrow Consols (lead).	15 16 0.	8.			
5000 Besore Kenwyn.	2 10 0.	6.	5 5/4.	Oct. 1858	
5000 Belling Well (cp.), Gwthian.	3 15 0.	3/4.	3 3/4.	Dec. 1858	
5000 Bolewone (copper).	1 17 6.	1.			
5238 Boscawell (tin, copper).	—.	5.			
5238 Bosweddan and Wheal Castle.	32 0 0.	—.			
5000 Bream Iron Mining Company.	0 10 0.	1/2.			
5000 Brook Wood, Buckfastleigh.	0 12 6.	1.			
20000 Bronyford (16000 st. pd.) [L.]	3 14 0.	5.			
4090 Brynglas (lead), Cardigan.	0 12 0.	2.			
5000 Buckland Consols (copper).	0 5 0.	1/4.			
5380 Bulver and Bassett Unit. (cp.)	2 5 0.	2/4.	2 3/4.	July, 1858	
12000 Bulver and Bertha (copper).	2 10 0.	1.			
5000 Cae-Cynon, Cardiganshire.	0 10 0.	1/2.			
1775 Calstock United (tin and cp.).	6 15 0.	1/2.	1.	Sept. 1858	
915 Caiveldunick, Wendron.	11 0 0.	10/4.			
18000 Camborne Consols (copper).	14 15 0.	2.			
5000 Camborne Vein & Wh. Francis.	3 18 0.	21/4.	3 3/4.	Sept. 1858	
1204 Cardon Cons. (cp.), St. Cleer.	11 10 0.	4.			
1000 Cardigan Consols.	4 0 0.	6.			
5000 Cardigan South Bdg. (lead).	1 0 0.	1.			
916 Cargol (silver-lead), Newlyn.	13 15 7.	7.			
2580 Carmarthen United (lead) [L.]	2 10 0.	3.			
3270 Carnswas (ld., cp.), Mawgan.	0 13 0.	—.	5/4.	Oct. 1858	
1065 Carvansall (cp.), Newlyn.	11 0 0.	3/4.			
3675 Carvansall United.	3 12 6.	5/4.			
5000 Carway & Dulynn (coal) [L.]	2 10 0.	6.			
6460 Castello (lead & blende), Card.	0 11 6.	18/4.	18 1/4.	Aug. 1858	
7146 Catherine & Jane Cons. (lead).	0 0 0.	7.			
6000 Cholincton Consols (copper).	5 0 0.	3.			
20000 Cleator (silver-lead) [L.]	3 0 0.	2/4.			
1244 Clujah & Westhown (tin, cp.).	24 6 6.	3/4.	3 3/4.	May, 1858	
3400 Coed Mawr Pool (lead) [L.]	5 6 6.	—.			
5000 Collett (lead), Ireland [L.]	0 5 0.	—.			
2450 Cook's Kitchen (cp.), Illogan.	16 10 9.	5/4.			
256 Copper Hill (copper), Illogan.	4 0 0.	50.			
2000 Cornwall Great Con. (ld., &c.)	2 0 0.	2/4.	2 2/4.		
2000 Crellake (cp.), Tavistock.	—.	2.	1 3/4.	2.	
5000 Credwade (cp.), Tavistock.	0 9 0.	3.			
5000 Cwrt Seben (lead) Limited.	2 6 6.	1/4.			
1660 Duke, North Staffordshire [L.]	1 0 0.	11s.	10s. 11s.	Nov. 1858	
2145 Dairhurn (ld.), Rhayader [L.]	2 19 6.	—.			
5000 Dairhurn (sil.-lead), Cardigan.	6 0 0.	4/4.			
5000 Denbighshire (cp.), Bris. [L.]	0 2 6.	—.	2s. 25.6d. 3s.		
4955 Devon and Courtney (cp.).	1 16 1.	16s.	18s. 18s.	Dec. 1858	
4000 Devon Burren (copper).	5 5 0.	1/4.			
6240 Devon Great Elizabeth (cp.).	0 4 0.	1.			
5000 Devon New Copper Co. [L.]	2 0 0.	—.			
4566 Devon Wheal Butler (copper).	2 1 6.	3s.			
6000 Devon Wh. Union (cp.), Tavistock.	1 0 0.	3.			
4315 Duke of Cornwall, Lostwithiel.	5 9 4.	3/4.			
3000 Dwyngwyn (lead), Wales.	12 6 6.	12.			
256 Eaglebrook, Llanguaeth, Car.	0 0 0.	30.			
4996 East Alfred Consols (copper).	1 19 4.	5/4.	16s. 17s.		
512 East Bassett (cp.), Redruth [S.E.]	29 10 0.	16/2.	170 175.	Feb. 1858	
1024 East Buller (copper), Redruth.	13 0 0.	1/4.	1 1/4.		
6000 East Carn Barn (cp.), Redruth.	1 1 6.	6/4.			
6144 East Caradon (cp.), St. Cleer.	2 5 0.	—.	5/4.		
18000 East Fronjough (sil.-lead) [L.]	0 5 0.	—.			
4000 E. Gunnis Lake & S. Bedf. (cp.)	4 7 6.	1/4.	1 1/4.	Dec. 1858	
5000 East Hender (copper), Crownhill.	0 12 0.	—.			
4996 East Providence (tin), Uley L.	1 0 6.	1/4.	1 1/4.	Dec. 1858	
6000 E. Rosewarne (sp., tin), Gwinn.	1 13 6.	—.	5/4.	Nov. 1858	
6478 East Tamar (sil.-ld.), Berriford.	3 1 0.	—.			
256 East Tolgas (copper), Redruth.	47 0 0.	60.	57 1/4.	60.	
1000 East Trefusis (cp.), Gwennap.	5 8 10.	2/4.			
19. Wheal Agrav (cp.), Illogan.	67 0 0.	10.			
6000 E. Wheal Clifford (cp.), Ken.	2 0 0.	1/4.			
4000 E. Wh. Russell, Tavistock [S.E.]	5 1 0.	7/4.	7 3/4.	7 1/4.	Nov. 1858
1920 Eggar Lee (L.).	10 0 0.	11/2.			
5000 Frank Mills (lead), Devon.	3 8 6.	4.			
1550 Garret (lead), Flint.	2 19 0.	—.	7s. 6s. 7s.	Dec. 1858	
4990 Gawton (copper), Tavistock.	3 13 0.	—.	3/4.	5s. 6s. 6d.	Nov. 1858
6000 Geirfheiran (sil.-ld.), Cardigan.	1 0 0.	1.			
2890 Great Cadron and Slade [L.]	1 0 0.	—.	2/4.	2/4.	
4995 Great Cadron (cp.), St. Ives.	0 6 0.	—.	1/4.		
6000 G. G. Grimm (cp.), St. Austell.	1 0 0.	1/2.	1 1/2.		
4900 Gt. Dowgas (tin, &c.), St. Austell.	5 10 0.	3/4.			
6000 Gt. E. Tamar (ld.), Berriford.	—.	—.			
5000 Great Hewas United, (tin).	1 19 0.	—.	7s. 10s. 11s.	Mar. 1858	
1242 Great Onsaw Cons., Camelfeild.	1 0 0.	—.			
1243 GL. Sheba Con., St. Cleer.	25 2 0.	2/4.	2 2/4.	June, 1858	
6000 Great Tamar (sil.-ld. & cp.).	—.	—.			
4000 GL. Tregutte Consols, Altarnun.	1 0 6.	1/4.			
5120 Great Wheat Alfred [S.E.]	11 14 11.	3/4.	3/4.	Oct. 1858	
5120 Great Wheat Baddern (tin).	3 13 0.	6s.	5s. 6s.	Aug. 1858	
6300 Gt. Wh. Busy (sp. & tin), Ken.	9 0 0.	3/4.	3/4.		
1024 Gt. Wh. Fortune, Breage.	27 13 10.	4/4.			
5000 Great Wh. Martha (cp.) [L.]	0 5 0.	7s.	5s. 7s.	Dec. 1858	
8634 Gwydr Park Con., Llantwit.	0 7 3.	—.			
6400 Harwood (lead) [L.]	1 0 6.	—.			
7249 Hawkmoor (tin), Calstock.	2 1 0.	—.	5/4.		
1000 Hardwood United (lead) Flint.	74 0 0.	25.			
5000 Holmbush (ld.), Callington.	4 14 0.	1/4.	1 1/4.	16s. 18s.	Nov. 1858
6000 Hockwbury Bridge (cp.).	0 7 6.	—.	3/4.		
5000 Kelly Bray (ld.), Callington.	3 19 6.	2/4.	2/4.		
2045 Keneggy, (cp., & c.) Breage.	1 4 7.	—.			
6000 Kewick (lead), Portreath.	4 9 6.	1/4.			
6500 Klomerton (lead), Salop.	1 3 0.	1/4.			
6000 Lady Bertie (cp.), St. E.	1 5 0.	—.	1 1/2.	1 1/2.	Nov. 1858
2500 Lady Eliza (lead) [L.]	1 14 6.	3/4.	3/4.	Dec. 1858	
1244 Leeda & St. A. (tin, tin, cop.).	14 16 3.	—.			
1245 Lelant Cone (tin), Trelan.	29 0 0.	1/4.	5/4.	1.	Nov. 1858
2000 Llandudno (copper), N. Wales.	1 10 0.	1.			
2000 Llanfymach (lead) Femb [L.]	4 10 0.	—.			
1200 Llywymynach (lead).	10 0 0.	10.			
6000 Llywymynach (lead).	1 10 0.	1.	5/4.	1.	
6000 Loxton (lead & copper).	0 7 6.	—.			
5000 Loughs (stake), Tippe [L.]	1 15 6.	1/4.			
5000 Moidstone (lead), Salop.	1 10 0.	—.	5/4.		
2000 Maria Cona (silver-lead) [L.]	1 0 0.	—.	1/4.		
1242 Mill Pool (tin, cp.), St. Hilary.	15 1 6.	—.	3/4.	4.	
3000 Milltown (sil.-ld.), Irele [L.]	1 0 0.	—.	1/4.		
7500 Mizion Great Con. (cop.), Llantwit.	1 19 2.	—.			
1066 Mold (lead), Flintshire [L.]	0 13 0.	—.	3/4.		
3755 Molland (copper), S. Mouton.	1 8 0.	—.	2s. 18. 6d. 2s.	Nov. 1858	
4157 Mount's Bay Cons., Marazion.	4 5 0.	—.			
3000 Nant-y-Car, Rhayader [L.]	2 13 4.	2/4.			
3200 New Force (lead), Alston.	1 0 0.	—.	5/4.		
6400 Nether Heth (lead).	0 10 0.	—.			
6000 New Birch Tor & Tiffey Cons.	1 1 0.	—.			
6000 New Green Hill (cp.), St. Austell.	1 10 0.	—.			
5000 Rosewall Consols (copper).	1 10 0.	—.			
1000 Rosewarne & Herland United.	2 10 0.	—.			
5000 Round Hill (cp., ld.), Salop.	2 5 6.	—.			
1500 Rubden (lead).	—.	—.			
5000 Rhiw Castle Mining [L.]	1 11 0.	—.			
10000 River Tamar Copper [L.]	0 10 0.	—.			
6000 Rosewall Hill & Kansan Utd.	2 0 0.	—.			
4090 Rosewarne Consols (copper).	2 2 0.	—.			
1024 Rosewarne & Herland United.	2 10 0.	—.			
5000 Round Hill (cp., ld.), Salop.	2 5 6.	—.			
15000 Ruarden Colliery.	0 7 0.	—.			
6000 Severn Mine (lead) [L.]	1 1 0.	—.			
5000 Siford Consols.	0 6 0.	—.			
4000 Siltney Wheal Butler (tin).	4 7 0.	—.			
2000 Shropshire Blackwood [L.]	5 0 0.	—.			
512 Silva Bassett (cp.), Gwennap.	0 8 0.	5/4.	6 3/4.	7 1/4.	May, 1858
6400 So. Butler & W. Penstruthal.	0 10 0.	—.			
4096 S. C.ara, Wh. Hooper (cp.).	0 17 0.	—.			
6000 So. Carn Brea (cp.) [S. E.]	2 9 0.	—.			
6000 So. Chafford Cliff, Gwennap.	1 6 1.	—.			
6144 S. Conduff (tin) [L.]	0 12 0.	—.			
3106 S. Crever (copper), Crownhill.	6 0 0.	—.			
6000 South Crowndale (copper).	0 12 0.	—.			
6000 South Cudrill (cp.), St. Austell.	0 16 0.	—.			
6000 S. Doicote & Carnarthen Con.	1 14 0.	—.			
2000 South Gorland (copper).	0 16 0.	—.			
2000 South Herland and Relstian.	1 0 0.	—.			
6000 South Lady Bertie (copper).	0 6 0.	—.			
512 South Penhaleldy (cp.).	0 9 0.	—.			
5000 So. Phoenix (cp.), Linkinh.	0 10 0.	—.			
1024 So. Providence (tin), Sithney.	3 7 0.	—.			
4096 S. Wh. Betsy, Mary Tavy, Dv.	0 3 0.	—.			
1105 So. Wh. Croft, Illogan.	1 18 0.	—.			
1024 S. Wh. Ellen (cp.), Illogan.	7 5 0.	—.			
4000 So. Wh. Seton (cp.), Camb.	1 10 0.	—.			
4000 Snow Brook, Plympton [L.]	2 0 0.	—.			
5208 So. Austell Consols (tin, &c.).	3 16 0.	—.			
1000 Stoney Tres (ld.), Cumbria.	0 5 0.	—.			
1024 Treborth (ld.), St. Hilary.	1 11 0.	—.			
6000 Treborth (copper), St. Hilary.	0 4 0.	—.			
1024 Treborth (ld.), St. Agnes.	1 5 0.	—.			
6000 Treborth (copper), St. Agnes.	1 5 0.	—.			
512 West Tolvalden (cp., tin).	0 4 0.	—.			
1879 West Trevelyan (tin, copper).	5 2 0.	—.			
512 West Wheal Frances, Illogan.	43 10 0.	—.			
10000 West Wheal Jane (tin, &c.).	2 0 6.	—.			
2560 W. Wh. Reeth (tin), Uley L.	1 0 0.	—.			
4000 Wh. Wheal Addams (copper, lead).	0 3 0.	27s.	1 1/4.	1 1/4.	Oct. 1858
6000 Wh. Wheal Aggar (copper), Illogan.	1 16 0.	—.			
8000 Wh. Amery (l. & c.), Christow.	10 0 0.	—.			
1024 Wh. Annis (cp.), Gwinnar.	1 2 0.	—.			
512 Wh. Annis (cp.), Altarnun.	1 2 0.	—.			
512 Wh. Bontes (tin), St. Agnes [L.]	1 0 0.	—.			
1024 Wh. Bontes (copper), Redruth.	3 6 0.	—.			
6000 Wh. Eliza (cp.), Whitch.	1 0 0.	—.			
1024 Wh. Ellen (cp.), St. Agnes.	1 5 0.	—.			
1000 Wh. Emily (copper), Tivethian.	2 0 0.	—.			
4000 Wh. Emma (cp.), Buckfastleigh.	1 2 0.	—.			
2000 Wh. Emma Exten (cp.), Buck.	0 1 6.	—.			
1070 Wh. Enys (tin), Wendron.	18 1 0.	—.	10.		
6000 Wh. Florence (tin), Llantwit [L.]	1 0 0.	—.	1.		
726 Wh. Franco, near Tavistock [L.]	1 0 0.	—.			
512 Wh. Fursden (tin), Sithney.	2 0 0.	—.			
4000 Wh. Glynn (tin), Bodmin.	2 13 0.	—.			
4000 Wh. Grenville (copper).	5 6 0.	—.			
512 Wh. Harriett, Cambrone.	3 17 0.	—.			
1000 Wh. Head (copper), Crowan.	2 12 0.	—.			
6000 Wh. Henry, Heivin (lead) [L.]	1 0 0.	—.			
512 Wh. Jewell (copper), Tregony.	2 10 0.	—.			
4000 Wh. Ludcock (lead), St. Ives.	1 20 0.	—.			
1024 Wh. Margery (tin), Bodmin.	12 1 0.	—.			
6000 Wh. Mary Emma (tin), Lydford.	5 5 0.	—.			
512 Wh. Maudlin (copper), Lanvery.	3 0 0.	—.			
128 Wh. Polmear (sil.), St. Austell.	0 15 0.	—.			
3000 Wh. Pollard (copper).	0 15 0.	—.			
287 Wh. Russell (cp.), Tavistock [L.]	2 5 6.	—.			
4096 Wh. Sidney, Plympton [L.]	1 18 9.	—.			
6000 Wh. Tedihi (copper), Illogan.	2 7 6.	—.			
4000 Wh. Treborth (tin), Plympton [L.]	0 2 6.	—.			
512 Wh. Trefusis (tin), Sithney.	2 5 0.	—.			
6000 Wh. Union (copper), Redruth.	1 15 0.	—.			
3102 Wh. Unity (tin), Gwinnar.	9 9 0.	—.			
1024 Wh. Uny (tin), Bodmin.	2 6 0.	—.			
1024 Wh. Wagstaff, St. Eirth.	0 10 0.	—.			
5000 Willow Bank (lead) [L.]	1 7 6.	—.			
4096 Wh. Wrey Consols, Buckfastleigh.	0 9 3.	—.			
4096 Warner (copper), Devon.	1 8 0.	—.			
6000 Zeal Manor (cp.), St. Tawton.	1 2 6.	—.			

#### MISCELLANEOUS

<i>Shares.</i>		<i>Paid.</i>	<i>Nom. Pr.</i>	<i>Bus. dist.</i>
50000 Anglican Smelt., Reduc. & Coal Co. [L.]	0 10 0	..	..	
350 Atlantic Telegraph [L.]	1000 0 0	.. 360	.. 250	280
20000 Australian Agriculture	19 0 0	.. 35	.. 35	100
60000 Australian Royal Mail	10 0 0	.. 1 $\frac{1}{2}$	.. 3	1
6000 British & Irish Magnetic Telegraph, A.	50 0 0	.. 42	.. 40	42
3261 Ditto B, 7 per cent, till 1862	20 0 0	.. 21	.. 19	21
11739 Ditto C	20 0 0	.. 15	.. 13	15
8915 Canada	32 10 0	..	.. 112	116
3000 Channel Islands Telegraph [L.]	10 0 0	.. 10 $\frac{1}{2}$	.. 10	10 $\frac{1}{2}$
200000 Crystal Palace	5 0 0	.. 1 $\frac{1}{2}$	.. 1 $\frac{1}{2}$	1 $\frac{1}{2}$
30000 Ditto (Preference)	5 0 0	.. 5 $\frac{1}{2}$	.. 5	5 $\frac{1}{2}$
60000 Eastern Steam	20 0 0	.. 2 $\frac{1}{2}$	.. 2 $\frac{1}{2}$	2 $\frac{1}{2}$
700000 Electric Telegraph	100 0 0	.. 115	.. 111	113
7199 Ditto, (New.)	10 0 0	.. 23 $\frac{1}{2}$ pm.	.. 23 $\frac{1}{2}$ pm.	23 $\frac{1}{2}$
700000 Engl. and Austr. Copper Smelting Co.	5 0 0	..	.. 1 $\frac{1}{2}$	1 $\frac{1}{2}$
34364 European and American Steam [L.]	9 0 0	.. 3	.. 1 $\frac{1}{2}$	1 $\frac{1}{2}$
25000 Indian and Australian Telegraph	0 2 0	..		
50000 London Discount	5 0 0	.. 1 $\frac{1}{2}$ ds.	.. 1	34ds.
200000 London General Omnibus	4 0 0	.. 1 $\frac{1}{2}$	.. 1 $\frac{1}{2}$	1 $\frac{1}{2}$
80000 National Discount	5 0 0	.. 5 $\frac{1}{2}$ ds.	.. 5 $\frac{1}{2}$ ds.	5 $\frac{1}{2}$
1724 New Brunswick and Nova Scotia Land	80 0 0	.. 18	.. 15	18
50000 Oriental Gas	1 0 0	.. 1	.. 1	1
120000 Peel River Land and Mining	5 0 0	.. 3	.. 2 $\frac{1}{2}$	3
30000 Peninsular and Oriental Steam	60 0 0	.. 89	.. 81	83
20000 Peninsular and Oriental Steam (New)	10 0 0	.. 14 pm.	.. 12 13 pm.	
40000 Red Sea and India Telegraph	2 0 0	.. $\frac{1}{2}$ pm.	.. $\frac{1}{2}$ pm.	
15000 Royal Mail Steam	60 0 0	.. 61 xd.	.. 59	61
10000 Rhymney New	15 0 0	.. 7 $\frac{1}{2}$	.. 7 $\frac{1}{2}$	
10000 Rhymney Iron	50 0 0	.. 24	.. 25 $\frac{1}{2}$	26 $\frac{1}{2}$
200000 Scottish Australian Investment	1 0 0	.. 1 $\frac{1}{2}$	.. 1 $\frac{1}{2}$	1 $\frac{1}{2}$
14200 South Australian Land	25 0 0	.. 39	.. 38	40
75000 South of Europe Mining Co. [L.]	1 0 0	..		
75000 Submarine Telegraph Script	1 0 0	.. 1	..	1 $\frac{1}{2}$
75000 Submarine Telegraph Registered	1 0 0	.. 1	..	1 $\frac{1}{2}$
500000 Trust & Loan Co., Upper Canadian [S.E.]	5 0 0	..		
19000 Van Diemen's Land	28 10 0	.. 12	.. 10	11
<i>Exchange.</i> Those mines with [L.] appended have been incorporated with <i>Liability.</i>				

\* Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal

tion which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we append information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their offices, No. 26, FLEET STREET, where all communications are requested to be addressed.—December 25, 1858.

## THE MINING SHARE LIST.

## DIVIDEND MINES.

Shares.	Mines.	Paid.	Nom. Pr.	Business.	Dividends Per Share.	Last Paid.
5120 Alfred Consols (cop.), Phillack* [S.E.]	2 11 10.	8 1/2	8 1/2	19 5 6.. 0 2 6—Oct.	1858	
16000 Bampfylde (copper), Devon	0 12 6..	4	4	0 0 7 1/2 0 0 7 1/2—May,	1858	
4600 Bedford United (copper), Tavistock*	2 6 8..	6 1/2	6 1/2	10 8 6.. 0 2 6—Oct.	1858	
240 Boscombe (tin), St. Just*	20 10 0..	57 1/2	57 1/2	23 0 0.. 0 0 6—Nov.	1858	
260 Bothalack (tin, copper), St. Just*	91 5 0..	205	205	42 5 0.. 0 2 10 0—Oct.	1858	
46000 Caistor Consols (copper)	5 0 0..	4 1/2	4 1/2	0 2 6 0.. 0 2 6—Dec.	1857	
16000 Carr Brae (copper, tin), Illogan	15 0 0..	62 1/2	67 1/2	24 15 0.. 0 2 6—Aug.	1858	
20000 Cefn Cwm Brynwy (lead), Cardiganshire	33 0 0..	37	37	5 0 0.. 0 2 0—Mar.	1858	
20000 Collacone (copper), Lauerton	5 0 0..	12 1/2	12 1/2	2 5 0.. 0 8 0—Oct.	1857	
12000 Copper Miners of England	25 0 0..	26	26	7 1/2 percent.	Half-yearly.	
30000 Ditto ditto (stock)	100 0..	25	25	1 percent.	Half-yearly.	
1055 Craddock Moor (copper), St. Cleer*	8 0 0..	30	29 31	2 4 0.. 0 5 0—Nov.	1858	
867 Cwm Erynn (lead), Cardiganshire*	7 10 0..	14	14	0 10 0.. 0 10 0—Nov.	1858	
128 Cwmystwyth (lead), Cardiganshire*	0 0 0..	300	145	0 0 5.. 0 9—Sept.	1858	
4076 Devon and Cornwall	4 6 3..	9	12 1/2	0 7 6.. 0 1 4—	1858	
102 Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0..	460	455 460	63 9 0.. 0 7 0—Nov.	1858	
25000 Dickeath (copper, tin), Camborne*	128 17 6..	200	492 10 5..	5 0 0—Dec.	1858	
300 East Daren (lead), Cardiganshire*	32 0 0..	110	105 110	54 0 0.. 3 0—Dec.	1858	
2048 East Falmouth (copper), Gwenap*	2 0 0..	3	0	0 7 6.. 0 3 0—Jan.	1858	
128 East Pool (tin, copper), Pool, Illogan*	24 5 0..	175	305 0..	2 10 0—Aug.	1858	
5700 Exmouth (silver-lead), Christow*	14 10 0..	8	3	15 0 0.. 0 2 4—April.	1858	
1400 Eym Miners Co. (lead), Derbyshire	5 0 0..	38	18 13 4..	1 0 0—Aug.	1858	
243 Grampier and St. Aubyn (cop.) [S.E.]	10 9 0..	135	142 1/4 147 1/4	17 0 0.. 3 0—Nov.	1858	
6000 Great South Tolpuddle [S.E.] Redruth	19 10 0..	13 1/2	13 1/2 13 1/2	3 7 6.. 0 10 0—Dec.	1858	
1024 Herodsfoot (lead), near Liskeard	10 0 0..	7	7 7 1/2	4 7 6.. 0 12 6—June	1858	
2560 Isle of Man, Limited (lead)*	25 0 0..	42	58 3..	1 0 0—June	1858	
1600 Levant (copper, tin), St. Just	2 10 0..	105	1076 0..	5 0 0—Nov.	1858	
4000 Llibwistle (lead), Cardiganshire, Wales*	15 10 0..	100	317 10..	2 0 0—Dec.	1858	
5000 Mendip Hills (lead), Somerset	15 0 0..	134	18 6.. 0 10 0—May.	1858		
1800 Minera Mining Co., Lim. (ld), Wrexham	0 0..	110x3	35 6.. 2 10 0—Nov.	1858		
20000 Mining Co. of Ireland (cop., lead, coal)	7 0 0..	13 1/2	13 1/2 13 1/2	13 13 4.. 0 5 7—July	1858	
470 Newtonards Mining Co., Co. Down*	50 0 0..	35	55 0.. 1 0—July	1858		
6000 N. W. Bassett (cop., tin), Illogan* [S.E.] <i>et al.</i>	9 0..	8 8 1/2	14 12 0.. 0 8 0—Aug.	1858		
6400 Par Consols (cop.), St. Blazey [S.E.]	1 2 6..	17	15 16..	32 15 0.. 0 10 0—Oct.	1858	
200 Phomix (copper, tin), Linkinhorne	100 0..	410	400 410	294 10.. 0 25 0—Nov.	1858	
1000 Polberro (tin), St. Agnes (Preferential) 15 0..	5	18 11..	1 0 0—	18 11 9.. 1 0 3—July	1857	
1772 ditto ditto (Old and ditto)	—	5	1 7 0.. 0 7 0—Sept.	1857		
560 Providence (tin), Ury Leatant* [S.E.]	20 13 2..	64	61 63	79 4.. 6 3—Nov.	1858	
2500 Rhoswydol and Easedale (lead)	11 5 0..	12	0	0 16 0.. 0 3 0—July	1858	
15000 Ruardean Colliery Company, Limited	0 5 0..	24	0 10 10..	1 0 1—Aug.	1858	
256 South Cardon (cop.), St. Cleer* [S.E.]	2 10 0..	410	400 410	546 0.. 0 8 0—Sept.	1858	
256 South Garmo	20 0..	70	2 0..	2 0 0.. 0 2 0—Nov.	1858	
512 South Tolpuddle (cop.), Redruth, Cornwall	8 0 0..	80	77 1/2 80	79 10 0.. 2 0 0—Nov.	1858	
496 South Wheal Frances, Illogan* [S.E.]	18 9..	235	230 235	310 5.. 5 0—Nov.	1858	
20000 St. Day United (tin and copper)	2 0 0..	123..	112..	0 3 6.. 0 1 0—Feb.	1858	
476 St. Ives Consols (tin), St. Ives	16 0..	37 1/2	35 37 1/2	920 0.. 0 2 10 0—Nov.	1858	
6000 Tincrift (cop., tin), Pool, Illogan* [S.E.]	9 0..	32 1/2	31 1/2 32	8 18 6.. 0 5 0—Sept.	1858	
20000 Vale of Towy (lead), Carmarthen* [S.E.]	12 6..	13..	12.. 13..	9 5 0.. 1 0—July	1858	
512 Wendron Consols (tin), Wendron*	23 7..	43	3..	3 0 0.. 1 0 0—Sept.	1858	
256 West Bassett (copper), Illogan* [S.E.]	1 0 0..	23	21 22..	15 3.. 0 9 0—Nov.	1858	
256 West Cardon (cop.), Liskeard [S.E.]	20 0..	132..	133 140	287 5.. 0 2 0—May.	1858	
6400 West Fowey Consols (tin and copper)	7 0 0..	61	0..	2 6.. 0 2 6—Mar.	1858	
400 West Wheal Seton (cop.), Caiborne*	38 10..	295	290 295	146 0.. 0 7 0—Dec.	1857	
240 Wheal Bal (tin), St. Just	15 0 0..	18	3..	0 0 0.. 0 10 0—Nov.	1858	
512 Wheal Bassett (copper), Illogan* [S.E.]	5 9..	215	210 220x d.	507 10.. 0 6 0—Dec.	1858	
256 Wheal Butler (cop.), Redruth* [S.E.]	0 0..	180	395	0 0 5.. 0 5 0—Nov.	1858	
409 Wheal Edward (cop.), Calstock [S.E.]	10 0..	3..	214	0 5 0.. 0 5 0—Mar.	1858	
128 Wheal Friendship (copper), Devon	50 0..	90	2385 10..	0 10 0—Feb.	1858	
448 Wh. Margaret (tin), Ury Leatant* [S.E.]	15 0..	63 65	63 65	93 0.. 3 10 0—Nov.	1858	
1024 Wh. Mary Ann (ld), Menheniot* [S.E.]	8 0..	46 x d.	44 45	49 17 6.. 2 5 0—Dec.	1858	
80 Wheal Owles, St. Just, Cornwall	70 0..	300..	225 13..	13 0.. 5 0 0—Aug.	1858	
4096 Wheal Trevallyn (ld), Illogan* [S.E.]	4 10 4..	291..	29 30	34 10 0.. 1 0 0—Oct.	1858	
5000 Wicklow (copper), Wicklow	5 0 0..	38 1/2	38 1/2	30 5.. 6 1 10 0—July	1858	

## MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Nom. Pr.	Business.	Dividends Per Share.	Last Paid.
1624 Balleswidden (tin), St. Just	11 5..	5	12 5..	0 5 0—Jan.	1854	
1200 Brightside & Foggart Grove, Derbyshire	3 0..	31 1/2	3..	0 0 0.. 3 0 0—April.	1858	
100 Brynford Hall (lead), Flintshire	25 0..	50	13 0..	0 0 5.. 0 0 5—July	1858	
1000 Bryntall, Llanidloes, Montgomeryshire	8 5..	11 1/2	10 1/2 11 1/2	0 5 0.. 0 5 0—July	1858	
390 Budnick Consols (tin), Perran	2 2 6..	7	6 1/2 7	10 0.. 0 10 0—Mar.	1857	
6000 Bwch (silver-lead), Cardiganshire	3 6..	1 1/2	0..	2 6.. 0 2 6—Aug.	1858	
2048 Carnyorth (tin), St. Just	4 15..	1 1/2	4 4 1/2	0 15.. 0 3 0—June	1858	
256 Conduorw (cop.), Camborne	20 0..	55..	60 70	85 0.. 0 2 0—June	1857	
20000 Craven Moor, Limited (lead), Yorkshire	0 0..	34	0..	0 9 0.. 0 9 0—Feb.	1858	
230 Derwent Mines (all-lead), Durham	300 0..	150	122..	0 10 0.. 0 10 0—June	1857	
672 Dine Dang (tin), Guylavell*	35 5..	81/2	71 1/2 8	16 7 6.. 1 10 0—Mar.	1858	
12800 Drake Walls (tin, copper), Calstock	2 1..	1 1/2..	18.. 20..	0 13 6.. 0 2 0—Sept.	1857	
1024 East Wheal Margaret (tin, copper)	17 16..	2..	13.. 21/2	0 5 0.. 0 2 0—Sept.	1858	
490 Fowey Consols (copper), Tywardreath	4 0..	31 1/2	41..	4 3 0.. 0 5 0—Mar.	1858	
4448 General Mining Co. for Ireld. (cop., id.)	4 0..	1 1/2	1 1/2	1.. 0 8.. 0 3 3—June	1858	
2000 Goginan (silver-lead), Cardiganshire	12 5..	21/2	21/2..	0 10 0.. 0 10 0—Nov.	1858	
256 Conduorw (cop.), Camborne	20 0..	55..	60 70	85 0.. 0 2 0—June	1857	
20000 Great Moor, Limited (lead), Yorkshire	0 0..	34	0..	0 9 0.. 0 9 0—Feb.	1858	
230 Derwent Mines (all-lead), Durham	300 0..	150	122..	0 10 0.. 0 10 0—June	1857	
672 Dine Dang (tin), Guylavell*	35 5..	81/2	71 1/2 8	16 7 6.. 1 10 0—Mar.	1858	
12800 Drake Walls (tin, copper), Calstock	2 1..	1 1/2..	18.. 20..	0 13 6.. 0 2 0—Sept.	1857	
1024 East Wheal Margaret (tin, copper)	17 16..	2..	13.. 21/2	0 5 0.. 0 2 0—Sept.	1858	
490 Fowey Consols (copper), Tywardreath	4 0..	31 1/2	41..	4 3 0.. 0 5 0—Mar.	1858	
4448 General Mining Co. for Ireld. (cop., id.)	4 0..	1 1/2	1 1/2	1.. 0 8.. 0 3 3—June	1858	
2000 Goginan (silver-lead), Cardiganshire	12					